Editorial Articles

From the Editor: Transdisciplinarity

Tara S. Behrend

I recently joined a university effort to build a new, interdisciplinary PhD program in Applied Analytics. The team consists of faculty from medicine, health, nursing, education, physics, engineering, and me, from psychology. The experience has been mostly very positive; it's a chance to learn about what scholars from other disciplines think about I-O and how we can work together to build something. It makes me wonder why this sort of collaboration isn't more common at my university. I imagine it isn't very common in most settings. I wonder, too, about whether this thing we are building is better than any of us or in fact worse than any of us. By compromising with others, do we lose all the valuable bits of our own approach?

Disciplines differ from each other partly in the kinds of assumptions they make about the world. Sociologists and psychologists, for example, are often interested in the same kinds of problems. They disagree about the explanations but agree about the observations. Take the example of a plane crash. A number of scientists studying the cause of the crash would come up with different answers for what "caused" the crash. I-Os might focus on individual and small-group factors, such as pilot training and selection, or flight crew communication. An engineer might instead focus on better hardware design. Both of these researchers would feel strongly that their approach was "right." Both would feel frustrated that the other side ignored their input.

It generally feels very uncomfortable to work with people from other disciplines. It's easy to slip into defensiveness. It's much easier to work with people who have the same assumptions you do—and not spend time arguing about (for example) whether person or situation factors are more important or whether emotional intelligence is real. But by opting out of these difficult experiences, we all ensure that those questions will never be answered.

In my opinion, the best science happens when two people who disagree about something come together and design a study that resolves the disagreement. There are some great examples of this happening within I-O psychology. But if we want to make serious contributions to improving society, we should also engage in this kind of behavior across disciplines. We should do so in the way we teach, and conduct research, and work with clients.

It's also worth noting that not all questions are scientific questions and that we, as scientists, should be open minded (but not so open minded that our brains fall out). Not all questions are scientific, but many questions are, and when we see pseudoscience or grandstanding masquerading as science, we should call it out. Part of working with nonscientists should include communication about what science does and why it is actually superior to other methods of answering certain questions.

This issue of *TIP* has a few good examples of multidisciplinarity. Check out "I-O Outside I-O" from **Mark Smith** and **Alex Alonso** for an overview of how workplace bullying research might intersect with childhood bullying research. Updates from the GREAT Committee and the HWP Network have advice and examples about how to share I-O with nonprofits and government agencies. Crash Course and the Modern App show us how to interface with the world of technology. These articles are a great start to a goal we should all adopt, as thinkers and as doers.

The President's Message

Fred Oswald

The summer has afforded many of us some much-needed time for vacation and family (e.g., my niece and nephew, **Ainsley and Spencer Powers**, enjoy playing pinball at our house*). And fortunately, summer has also given SIOP members time to collaborate and engage in a number of creative and impactful initiatives on behalf of the society. Let me share my excitement with you by reporting a few of these activities in the limited space available here.

First, now less than 2 months away, let me remind you of the 13th Annual **Leading Edge Consortium** "Innovations in Executive Coaching: Deepening your Expertise in a Dynamic World" which will be held October 20-21 at the Hilton Minneapolis; to learn about it and register, see http://www.siop.org/lec/2017/. Huge and sincere thanks to **Sandra Davis** (chair) and the LEC Committee for their collaboration and hard work. This exciting 2-day event comprises six keynote speakers and TED-style talks, and equally exciting are all the related events: MPPAW (the Minnesota I-O group) will hold a meeting on October 18; on October 19, there is a briefing for HR professionals in the morning, a graduate-student briefing on executive coaching by **Michael Frisch** and **Rob Silzer** in the evening, followed by a presentation by **Vicky Vandaveer** on executive coaching; concurrently on October 19, there are two preconsortium workshops (Neuroscience for Coaching Leaders with **Robert Eichinger**, Team Coaching with **Krister Lowe**) that are already nearly filled to capacity; there is a networking dinners on Friday, and there's a postconference webinar on virtual coaching by Manuelle Charbonneau. LEC 2017 is not only an event for SIOP members but an experience!

Second, the Committee for Ethnic and Minority Affairs (CEMA) recently solicited SIOP member interest in volunteering for a *new mentoring program*. Mentors with I-O research and/or practice will meet once a month with graduate students, who through this relationship will gain expert knowledge, advice, and navigation skills in the world of I-O psychology. Mentors and mentees will meet at a reception event at the SIOP 2018 conference in Chicago. In addition to the graduate student benefits of the program, I strongly suspect those who mentor will gain and use new insights about what education, training, and diversity means for a younger generation of I-O psychologists (also known as "our future"). As of the time I write this – through the stalwart efforts of **Enrica Ruggs** (CEMA E&T liaison) and her subcommittee (**Lawrence Houston III**, **Sabrina Valpone**, **Gary Giumetti**), and **Kisha Jones** (CEMA chair) – there were over 70 students who signed up for the CEMA mentorship program, with more sign-ups coming in, and over 130 SIOP members willing to serve as mentors. In a word: Wow! There is a clear need and a desire to engage in these mentorship experiences, whether as a graduate student or as a mentor. Team SIOP is all about improving our profession and ourselves through initiatives like this.

Third, let me update you on another initiative that is going strong, and that is the *Robust and Reliable Research (RRR) task force*, headed by **Steven Rogelberg**. This task force of researchers and practitioners (**Tammy Allen, James Grand, Ron Landis, Doug Reynolds, John Scott,** and **Scott Tonidandel**) have generated their groundbreaking report "A Systems-Based Approach to Fostering Robust Science in Industrial-Organizational Psychology," which can now be read in our *IOP* journal as a focal article (it was open

until September 22 for public commentary). Whether you have submitted a commentary or not, I strongly encourage you to read the article for the many interesting and important points made about "open science" that are unique to stakeholders in I-O psychology (e.g., as an educator, practitioner, researcher, consumer, publisher, grant agency). For one, the article appreciates how I-O practitioners possess unique skills, experiences, and needs that inform the relevance of I-O psychology as a science, Furthermore, researcher–practitioner partnerships are invaluable to strengthening our profession and SIOP, given that practitioners are often at the forefront of creating, using, and scanning for those organizational innovations that our science and our research can inform, and those innovations can inform and test the relevance of our science. All of this makes me think of perhaps adopting the concept of "open practice" in tandem with "open science," to ensure a that all SIOP members are involved in the movement toward improved research and practice (e.g., these days in "open practice," many practitioners have been giving away their professional wisdom and tools for free on the Internet, for all to use and benefit from). Stay tuned for more terrific developments that the RRR Task Force has under way in the service of improving the standards and practices of our research.

Fourth, in the domain of SIOP's scientific advocacy work, **Jill Bradley-Geist** has led the charge as chair of the SIOP Government Relations Advocacy Team (GREAT), working closely with **Bill Ruch, Laura Uttley**, **Libby O'Hare**, and colleagues at Lewis-Burke Associates to align a range of US government priorities relevant to all political parties with those areas that I-O psychologists can expertly address through their science and practice. The term "buckets" has been flying around this work, where the buckets refer not to delicious KFC meals but to the five substantive areas that are both federally relevant and where several SIOP members are already clearly engaged (examples in parentheses): national defense and security (**Amy Grubb**, chair of the SIOP policing task force), veterans affairs (**Nathan Ainspan** is reinvigorating these efforts), health and safety in the workplace (**Cristina Banks** in spearheading SIOP health registry initiative), technology-enabled workforce (**Rick Guzzo**, the LEC 2016 Talent Analytics event, and ongoing research and practice by SIOP members in the big data arena), I-O and social/behavioral education and training (where the SIOP E&T committee and the revised SIOP E&T guidelines, approved by APA just this past August, are clearly relevant). Where in the past we were connecting SIOP members more directly to federal initiatives, the hope is that these intermediary "buckets" will improve the alignment, marketing and visibility, engagement and footprint—and ultimately the impact—of SIOP and I-O psychology on federal agencies and initiatives.

Again, the collective talent of SIOP members is up to much more good than I can adequately relay here, so please take the time to enjoy the rest of *TIP* and read all that SIOP has to offer on a regular basis *(IOP, SIOP NewsBriefs, the Professional Practice Update*, social media, and more). You might think this message is impersonal, but truly, I would love to hear from YOU about how we are growing Team SIOP! If you have a moment, please e-mail me at foswald@rice.edu to let me know about the partnerships that you think reflect the best of Team SIOP in being important, useful, interesting, and inspiring. Not only will this be important learning for me; I'd like to share some of these special partnerships at the plenary session of the SIOP 2018 conference in Chicago (good luck with your conference submissions)!

* Thanks for humoring me here. I wanted Spencer and Ainsley to see their names in print (listed in reverse order here—they are both budding project leaders and first authors).

Crash Course in I-O Technology: A Crash Course in Web Scraping and APIs

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This issue, we'll be building on the ideas in my [Crash Course on the Internet](#) to understand two concepts that are very similar in purpose but very different in execution: web scraping and application programming interfaces (APIs). If you haven't read the Internet article yet, I recommend you do so first, or some of the concepts I talk about here will not make a whole lot of sense. Both approaches concern harvesting data from the internet algorithmically, but they are used in different circumstances.

The first of these approaches, "web scraping," is labeled by an evocative term. It sounds a bit like you're taking a knife to the web and pulling the gunk off. In practice, web scraping is a fairly complex engineering task, an algorithmic targeting and harvesting of specific, desirable data. The goal of scraping is to convert unstructured data from the Internet into a (structured) dataset. To be clear, scraping does nothing that you couldn't theoretically do by hand. You could individually open webpages and copy/paste key pieces of information in Excel or SPSS one at a time. The advantage web scraping brings over by-hand approaches is automaticity, which increases both speed and accuracy. For example, in one project, I scraped roughly $N = 100,000$ cases with near-perfect accuracy in about 8 hours, a task that would probably take undergraduate research assistants a few years with, I'd imagine, quite a bit less accuracy.

From a technical standpoint, web scraping thus involves quite a few steps:

1. Identify a data source that meets your needs (more on this later).
2. Determine how the data that you want are represented in that data source. If there is no API, you'll be scraping.
3. Develop an algorithm to harvest those data (called a "scraper").
4. Develop an algorithm to identify and traverse all the webpages in your data source that contain those data (called a "crawler").
5. Run a few strategically selected test cases to be sure your algorithms are correctly written given your needs and revise until perfect.
6. Execute the two algorithms, crawling as many pages as you think contain data and scraping each one for the data it contains, building your final dataset.

The technical aspects of this procedure are in stark contrast to how you go about harvesting data from APIs. So, what is an API? APIs are data gateways, carefully controlled points of entry into website databases. You can issue specific commands to an API and get data back, depending upon what data you can access and what format the creator of the API chose to put it in.

It's important at this point to be clear that APIs are not designed for you, the academic or organizational researcher. APIs are data gateways, designed for web applications to be able to talk to each other. If you've ever seen a "Like" button on a website that isn't facebook.com, the reason is that that website is using the Facebook API to bring Facebook functionality into itself. This defines the audience for APIs: programmers that want to integrate functionality from another website into their own, in real time. Remember from my last [Crash Course](#) that your web browser makes requests in sequence based upon instructions embedded in the first HTML file you download. Thus, the programmer's job is to ensure that their webpage creates an appropriately formatted API request given your identifying information and

then returns something meaningful for you to see. As a researcher, you are essentially coopting resources created for this purpose and instead harvesting the data for yourself.

Given that, it can seem paradoxical that API access is more clearly legal than web scraping. The reason is that although you may not access an API for its originally intended purpose, you are still accessing data that the API creator says you are permitted to access. When you scrape from the web, this isn't necessarily true; you can grab anything you can see in a web browser and throw it into a dataset, and it's not always clearly legal to do that.

Thus, legality is a major advantage of using an API over web scraping. A second major advantage is the amount of work involved. APIs are providers of structured data. You ask for data; the API provides it, in a nice, clean, well-organized data file. If there is no API, there is no provision; you are *taking* data, and it's up to you to figure out what to do with it once you get it.

That leads to a somewhat different workflow when you're working with APIs:

1) Identify the data source that meets your need (still getting to this later).
2) Determine how the data that you want are represented in that data source. If there is an API, do not scrape, because scraping is much harder than writing API requests.
3) Read the documentation for the API, completely. Become familiar with request formats, data output formats, and parameters.
4) Write a few test API queries in your web browser (or in a web-based tool given by the API provider for testing purposes).
5) Develop an algorithm to generate all the API queries you will need.
6) Run all those queries and build a dataset with the results.

In both web scraping and using API calls, you must identify an appropriate data source, develop some code to grab data and run a few tests cases, and then run it in full. So, we'll take each step in turn.

Let's See It in Action

Identify an Appropriate Data Source

The first step in both approaches is identifying an appropriate data source, and this is ultimately an external validity question. How do you know that the data you're scraping or requesting is from a population that will generalize to the population you want to know about?

This is a complicated question. **Tara Behrend** and I tackled this new-sources-of-participants-vs.-external-validity issue a few years ago in an *Industrial and Organizational Psychology Perspectives* article that I recommend you check out for context. But in brief, Landers and Behrend (2015) suggested that what you need to think through are issues of range restriction and omitted variables bias (sometimes called *endogeneity*). I will briefly walk through both. First, if your research question concerns the effect of X on Y but the population you're interested only includes some possible values of X or Y, you have a range restriction problem. For example, if you wanted to know about the effect of online bullying (X) on online participatory behavior (Y), you might not want to use YouTube, because YouTube has a reputation for high intensity bullying behavior in its comment sections, potentially restricting the type of people that would be willing to comment on it in the first place (range restriction in Y). Second, if your research question concerns the effect of X on Y but it is plausible that Z is driving that relationship, you have omitted variables bias. For example, let's imagine that we're interested in estimated the effect of time wasting on social media (X) on job performance (Y) among I-O psychologists using Twitter content.

Only somewhere [around 4% of SIOP members have Twitter accounts](#), and it seems likely that there are systematic differences between twittering I-Os and nontwittering I-Os for many variables, like techno-logical fluency, age, and personality traits. Whether we discover an effect or not for social media use, it's difficult to reasonably generalize that finding to "all I-O psychologists" unless we can make a theoret-ical case that none of these differences are likely to covary with both social media and job performance. Instead, we might consider sampling Facebook for I-Os, because about 75% of the US population uses Facebook regularly. This doesn't eliminate the possibility of an endogeneity problem, but it is much re-duced simply by a change in sampling strategy.

In the case of web scraping and API access, this is made somewhat more complicated because of the technical constraints of these procedures. Specifically, not only are there sampling concerns related to who uses the platform, but there will be additional concerns related to your access to those people. In the big data special issue of *Psychological Methods*, Landers, Brusso, Cavanaugh, and Collmus (2016) de-veloped this idea into something called a *data source theory*, which is essentially a formal statement of all your assumptions about your data source that must be true to meaningfully test your hypotheses. For example, let's continue trying to figure out if I-O psychologist use of social media is related to job performance. We would need a data source that, at a minimum:

1) Has an essentially random sample of I-O psychologists (or more specifically, missingness occurs randomly in relation to job performance and social media usage)
2) Gives us access to everyone in that sample's social media content so that we can quantify it

Facebook is a good option given #1 above for the reasons I already laid out. But #2 is trickier; Facebook only gives you access to data that you would normally have access to using facebook.com directly. In practice, that means you have access to (a) open groups, (b) closed and secret groups of which you are a member, (c) public content on pages, (d) user information that has been shared with you according to privacy settings, and (e) your own profile. In general, if it could appear in your news feed, you can ac-cess it. But is there any I-O psychologist on Facebook that has access to a random sample of all I-O psy-chologists on Facebook based upon their privacy settings? Probably not, and that might rule out Face-book as a data source.

Importantly, you must be willing to give up on addressing a particular hypothesis or research question using scraped or API data if you ultimately do not find support for your data source theory. Internet-based data collection like this is a lot like an observational study; you need to build a theoretical case for why looking at *this particular group* of Internet users can be used to draw meaningful conclusions.

In the case of organizational research questions, this might be a little easier; your population might be "people we can reasonably recruit using Facebook/Twitter/LinkedIn," which by definition will only in-clude people that are already on those social media platforms. But be sure to state that formally first; don't let it be an unnoticed assumption.

Run a Few Test Cases and Write Some Code

```
<iframe src="https://player.vimeo.com/video/230028909" width="640" height="480" frameborder="0"
webkitallowfullscreen mozallowfullscreen allowfullscreen></iframe>]
```

Writing a scraper and crawler is a complicated, iterative process with many roadblocks. It is something better delivered in workshop format than a column, so I'm not going to go into it here. Instead, I'll show you how to grab data from Facebook in R. It's much easier than you think.

First, you need to create what's called a "token." Tokens are a type of passphrase used to identify you when you access an API. That means you'll generate a token via the Facebook webpage, then you'll copy/paste that token into API requests as an identifier. To get your token, go to https://developers.fa-cebook.com/tools/explorer/ and click on "Get Token/Get User Access Token." Accept default permissions, and you'll see a very, very long text passcode appear. That is your token. It will remain valid for about two hours. If you click on it, it will auto-highlight so that you can copy/paste it elsewhere.

This webpage you've accessed is called the "Graph API Explorer," and it essentially allows you to "test" API requests before using them elsewhere. As I described above, this is really designed for web pro-grammers, but we're going to use it instead. So before heading to R, you're going to spend some time here "crafting" your API request. To understand what these requests should look like, you'll need to eventually read the Facebook API Documentation. But I'm going to give you a few examples for now.

Let's say I want to grab all the posts from the official SIOP Facebook page. That group is public, so my Facebook account (and yours) has access to it. According to the documentation, I need a unique identi-fier number for the group to pull up its posts using the API. To get that number, paste this into the Graph API explorer to the right of "GET":

    search?q=Society for Industrial and Organizational Psychology&type=page

This is where I hope you have already read my article on the Internet, because I'm going to skip a lot of background here and just tell you the new stuff. In addition to the server call, what you're seeing is a command that looks like a document ("search"), the query operator (?), and then a series of varia-ble/value pairs (variable 1 is called q with value "Society for Industrial and Organizational Psychology"; variable 2 is called type with value "page"), separated by &. This is a generic format for data sent to a server by URL called a GET request. When you execute it (hit Submit), you'll see a bunch of output from your search. You can also get this same output by going to the following web address:

    https://graph.facebook.com/search?q=Society for Industrial and Organizational Psychol-ogy&type=page&access_token=xxxx

Except: you must replace xxxx with the token copy/pasted from the Facebook Graph Explorer. If you do this correctly, you'll see the same output in your web browser that you see in the Graph Explorer.
This is how all API requests are made in practice; a request is sent to the API webpage, and data are re-turned. Servers then parse that return data and do something with it. When a web programmer inte-grates Facebook access into a webpage, what the programmer is really doing is constructing a URL, sending it, retrieving the data, and parsing it into appropriate output to send to your browser.
For now, notice that you have a bunch of ID numbers in that output (i.e., everything that matched your search term), but the one you want is the first one: 115024651712. Go back to the API Graph Explorer and replace your entire query string with this new API request:

    115024651712/feed
You'll get back data, and it should match the current output of the group page itself. Every word, photo, like, share, and so on is accessible somehow via this API. If you can see it on Facebook, you can get it algorithmically. But once we have figured out exactly what we want, how do we get that into a dataset? That's why we need R.

Quick quiz: what would the URL request for this same data look like? Try working it out for yourself be-fore looking ahead.

Switching over to R makes this even easier that it might otherwise be because there is already an R package that will create Facebook API queries for you, send them, and then convert them into a data frame format. It won't grab literally anything—so for certain types of data, you might still need to manually create API requests—but it will do quite a lot. In this case, use the following very simple code to grab the same dataset we were just looking at, replacing "xxxx" with your access token:

```
install.packages("Rfacebook")
library(Rfacebook)
token <- 'xxxx'
siop_df <- getPage(115024651712, token, n=100)
```

You'll see it send requests for 25 posts at a time—because that's the maximum possible size for a single API request per the Facebook documentation—and at the end you'll have a dataset stored in *siop_df* containing all the data you saw in the Graph Explorer. Done.

Run Your Code in Full

In most cases, your final goal will not be to collect a single group's or page's posts but to make many API requests across many contexts. For example, you might want to grab every post from every page or group mentioning the word "I-O psychology." In that case, you would need to algorithmically construct each intermediary dataset with appropriate API calls. For example, you might grab a list of group IDs from one series of API requests and store the results in a data frame; next, you might iterate over the data frame you just created to create a *new* data frame containing content from all the groups, one at a time. At this point, you are only bounded by your skill with R.

So Who Should Learn About Web Scraping and API Access?

Frankly, if you have ever tried to copy/paste data from a webpage for any reason, you would do well to learn a little about web scraping and APIs. A general rule among computer programmers is that if you ever need to repeat the same action more than twice, you should abstract it. For example, if you find you need to copy/paste three or more times from a webpage or set of webpages that share similar characteristics, you should instead develop one single computer program to do that for you as many times as you need it to. (In general, this is also a good rule to live by when using R.)

The big new frontier for web scraping in applied I-O psychology appears to be in recruitment and selection; these techniques allow for you to automatically, with no user input, harvest information about people and their activities for inclusion in predictive models. That's enormously popular, as long as you don't care too much about constructs. This might ultimately make scraping more appropriate for recruitment, as a first-round candidate-identification screen-in tool, more so than as a selection-oriented screen-out tool. However, advances in predictive modeling might change that over the next few years; we can already get some personality data out of Facebook likes (Kosinski, Stillwell, & Graepel, 2013).

When hunting for interviews, much like what happened with my articles on machine learning and natural language processing, I ran into several people willing to tell me that their organizations were using scraping and access APIs to collect data but unwilling to go on the record in any detail about it. Instead, the people more excited to talk were ones you had used it in published research projects or as fun side projects.

Scraping is often tied closely to natural language processing, so many of the same people using NLP obtained that data using scraping. For example, Rudolph and Zacher (2015), who were the researchers [that I described before](#) looking at differences in affect toward different generations and the impact of this on workplace relationships using Twitter data, did not pull that Twitter by hand; they used APIs. When I asked Cort Rudolph how they did it, he reported using the twitterR package, saying "it was very easy to scrape the data directly into an R dataframe… I remember thinking to myself 'That was easy!' when we got the data dumped originally." Reflecting on the experience, he recommended I-Os explore the idea of grabbing data from the internet this way, "especially when paired with more advanced text analytics procedures." He learned to do this simply by reading R library documentation; in most cases, as demonstrated above, downloading and converting data from a single API request into a data frame using a pre-existing R library requires less than five lines of code.

One of the most fun examples of API use comes from a Twitter bot called [@DrCattell](#). Before explaining this, a little context for non-Twitter users: it's common to create "fake" accounts on Twitter for entertainment-related purposes, and @DrCattell is an example of this. Another in the I-O space is [@Hugo-Munsterberg](#), whose profile describes him as the "Recently reanimated founding father of Industrial-Organizational Psychology," and he has a personality to match.

<blockquote class="twitter-tweet" data-lang="en"><p lang="en" dir="ltr">Love to be the fly on the wall as an #IOPsych academic tells client to scrap an 8-week long selection validation effort because p=.06! pic.twitter.com/hlrjmFgpTt</p>— Hugo Munsterberg (@HugoMunsterberg) August 12, 2017</blockquote>
<script async src="//platform.twitter.com/widgets.js" charset="utf-8"></script>]

@DrCattell is a bit different, though, in that in addition to being tweeted from by a real human being, @DrCattell also constantly scrapes things said by I-O psychologists on Twitter, runs them through natural language processing algorithms, and then posts new messages reconstructing "what an I-O would say." However, this also sometimes leads to some hard truths:

<blockquote class="twitter-tweet" data-conversation="none" data-lang="en"><p lang="en" dir="ltr">IOs are not linguistically unique or very interesting?</p>— Bot-IO Says (@DrCattell) August 17, 2017</blockquote>
<script async src="//platform.twitter.com/widgets.js" charset="utf-8"></script>]

To Learn More

To learn more about web scraping, I recommend my own materials, because I've given several workshops on the topic already! You can find them at http://scraping.tntlab.org. To be honest, basic text scraping is doable in R, but once you need a crawler, or if you want to scrape files like images or videos, you are best off moving to Python. R just does not handle files very well, and it does not always scale to "big data" scope very easily either. To try out Python scraping, I'd recommend following the tutorial we put together for Landers, Brusso, Cavanaugh, and Collmus (2016), available at http://rlanders.net/scrapy/

If you just want to access APIs, you can do this in R much more easily. The first technical step is always to *read the company's API documentation*. Remember that APIs are essentially computer programs written by the data host. That data host has an interest in providing good documentation because they

want people to access their data and integrate it into their websites. You benefit from this; extensive documentation is available on almost every API you might want. You can generally just Google "*company name* API documentation" and find what you need. Regardless, here are some APIs to try along with R packages designed for each:

- Facebook API documentation and Rfacebook
- Twitter API documentation and twitterR
- LinkedIn API documentation and Rlinkedin
- Google APIs documentation and googleAuthR
- The Star Wars API documentation, for any Star Wars question you might ever have and rwars

Once you have read the documentation, remember that the general technical approach is always the same. You'll need to figure out how to craft an appropriate GET request, you'll need to get authentication from the company and then pass credentials via that request somehow, and you'll need to reformat the data once you receive it into something readable. If you can solve those three problems, you've built a dataset, and these R packages automate most of the steps involved!

Conclusion

That's it for the sixth edition of *Crash Course*! If you have any questions, suggestions, or recommendations about scraping and APIs or *Crash Course*, I'd love to hear from you (rnlanders@odu.edu; @rnlanders).

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Don't Believe (Most of) the Technology Hype

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It's nearly a daily occurrence in media where we hear phrases like "technology is advancing exponentially, disrupting our world, and at a faster pace than ever before!" But what if most of these writers and technology commentators are creating a level of technology hype and making claims about this "accelerated pace" that aren't actually much different from our past technology advances. Or, are they neglecting to factor in practical and operational considerations that will heavily shape how or even if a technology is actually implemented?

We as I-O psychologists must providing a counterweight to the pressures of mass media, especially when it comes to the technology domain. This article will explore the dynamic and evolving perceptions of technology as well as considerations for refuting (or validating) hype. We feel this will help our field advance technology discourse by guiding our business constituents to move past outdated, overstated, and simplistic assumptions propagated in the media. Although we can't risk being passive or dismissive about technology trends, nor can we shirk our responsibility to represent—through our research and practice—a sophisticated approach to managing technology change.

But how do we begin assessing the technology winners and those that are just getting press for their sexy appeal or good marketing tactics? One resource to analyze trends effectively is published regularly by Gartner, a research, advisory, and information technology firm in their **Hype Cycle:** a compelling graphical research methodology to uncover which technology advances have merit as a viable opportunity for industry and which are just noise (2017). This branded approach was designed to:

- Represent the maturity and adoption of specific technologies—describing current trends and the likelihood of which the suggested technology will drive change in business environments.
- Provide a source of insight for companies, and their executives to ensure deployment of technologies in relation to their business goals.
- Aid investors understand the risks in the market versus viable products that might be worth the leap.

As practitioners and researchers, we can draw on this approach to understand the repeatable, often predictable cycles that surround technology change. The cycle offers a series of relative expectations along a time continuum which include: **Innovation Trigger, Peak of Inflated Expectations, Trough of Disillusionment, Slope of Enlightenment,** and a **Plateau of Productivity.** As a generalized form, below is Gartner's graphic representation showcasing the five core Hype Cycle phases for interpreting a technology's life cycle.

Gartner Hype Cycle
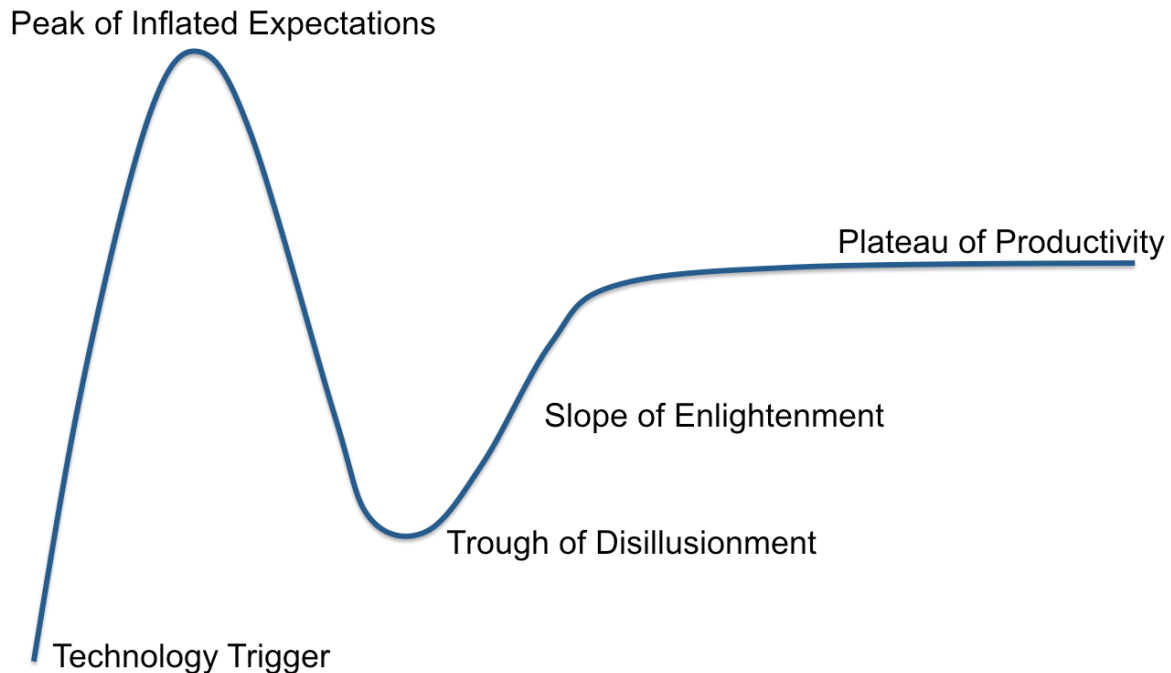
Gartner Hype Cycle

To summarize each phase on the cycle (the 2017 version of which is shown in Panetta, 2017):

- **Innovation Trigger:** This typically comes in the form of a technology that hasn't quite been proven yet through a working product but offers some viability in the commercial marketplace. Such examples cited in Gartner's recent 2017 report include 4D printing and human augmentation, which appear to be on the rise.

- **Peak of Inflated Expectations:** Typically showcased in the media with companies who claim success initially but often follow shortly with instances of failure. Smart robots and machine learning are currently showcased by Gartner as starting to see success in some organizations, but not yet being implemented successfully at broad scale.

- **Trough of Disillusionment:** Often highlighted by a lack of success in experiments and implementations, which leaves much to be desired and reduces interest from investors. With many beginning to fail in adoption or proof, the reality starts to set in that these investments may not work in the long term. One notable example Gartner highlights today is augmented reality. Without the proof of value for consumers, investments may begin to fade.

- **Slope of Enlightenment:** This is the point within the technology hype cycle where organizations and investors start to see consistent benefits. For those technologies that make it here, consumers begin to see products appear and more investors see a need for additional implementations. Gartner calls out virtual reality as one such technology that is starting to take shape after addressing initial phases of skepticism.

- **Plateau of Productivity**: At the final stage, full adoption starts to take off as the technology has proven to be viable, clearly defined, and applicable to many consumers.

I-O Psychologists' Responsibility to Challenge Assumptions

So what does this mean to I-O psychologists? To fully understand our impact in each of these spaces, we need to ensure we are ahead of the curve (literally and conceptually) to understand what is taking shape in technological advancements and which will impact work environments. Some attention to hype is instructive because it can point us to understand why the advances are being sought out in industry (what organizational challenges still exist for which technology can offer an aid) and how we can help advise companies: ignoring hype means neglecting workplace trends. Additionally, being ahead of the hype curve can give us an edge to learn from—and sidestep—past failures or common misconceptions on what is happening around us.

Like other jobs in the workplace, our roles as I-O professionals are constantly evolving and require a sharp edge as a business consultant and advisor. Additionally, it's paramount that researchers partner with industry and practitioners to leverage research and gain unconventional perspectives to guide and advise organizations on what is noise and what could lead to profound challenges or advances to an organization executing on a technology-driven transformation.

Representative Examples of Technology's Overhyped Impact

To illustrate cases of technology-centric hype, we focus on two topics that have a) drawn considerable attention in the general media and b) are predicated on conventional wisdom we feel is worth challenging. We list both below with a representative quote along with number (at the time when this article was written) of Google News Results and overall Google Results for that exact search term. For each, we briefly review the prevailing media tone and propose alternative viewpoints that we feel are essential to informing a more reasoned and ultimately, more effective approach to drive technology change that sticks.

Topic #1 - "Unprecedented Technological Change!"
[413 Google News Results; 30,600 Google Results]

An initial premise—either implied or directly stated—for many technology-centric articles is that current forces of technological disruption, including but not limited to the workplace, are entirely unprecedented in scope and scale. This framing certainly serves its role to "build the pain" and sense of urgency to recognize and rapidly address—often through investing in new technological platforms and employee upskilling—the clear and present workplace voids being created now like in no other time. The effect is predicted to be particularly strong and unique for "occupational churn" through which massive and

never-before-seen proportions of employees are claimed to be displaced from outdated jobs while new jobs are created.

But What if It's Not?

Technology change impacting the workforce can be sizeable without being seismic historically; recent research by two economists (Atkinson & Wu, 2017) integrates 165 years of data toward a compelling case against the latter. That is, at least in the U.S., occupational churn is actually lower than throughout most of our workforce history. Atkinson and Wu also challenge the common assumption that new technologies are more disruptive than ever, concluding that instead, these forces were weaker between 2010 and 2015 than in almost any past period. That is, technology's impact on the workforce is actually less monumental in recent years than it was in the past. Not only is technology disruption of jobs not unique in our history, it's also much less severe than it's been.

Topic #2 -"Artificial Intelligence Will Change Everything!"
[182 Google News Results; 80,800 Google Results]

Artificial intelligence (AI) as a topic has surged in attention in technology-focused publications and more broadly in the media. With this spike in topical interest has come a series of extreme and at times alarmist propositions about the scope of change AI will produce in the workplace: for autonomous driving, for drone-based commerce, for blockchain finance, and for robotic coworkers among other potential implications. The vast majority of the media attention on this topic focuses on the disruptive pressures being placed on the workplace as a result of these technologies in their fully realized forms, extrapolating from the isolated instances within which they're currently deployed to scale across the entire economy.

But What If It Won't?

Projections of AI-driven disruption are often overly optimistic and fail to take into account the vast depth of complexity involved in translating theoretical benefits to operational realities. Reasons for a more guarded approach to the pace and pervasiveness of AI's impact—drawing on the points summarized in a recent Knowledge@Wharton article (Knowledge@Wharton, 2017)—include the much slower progress possible (compared to the virtual aspects of new AI technology) in the physical and mechanical worlds, the sheer amount of high-quality data needed to calibrate the AI engine, the social/moral/ethical dilemmas that must be managed to implement systems in a public environment (not even including the political hurdles to overcome), and the expectation of not just high-accuracy but also transparent and explainable decisions resulting from AI.

Change the Conversation: How to Ride and Own the Hype Cycle

Our intent in this article is certainly not to recommend that our field take a naive or dismissive approach to the concept of technological change. The risks of doing so and as a result appearing out of touch, poorly adaptable, or irrelevant are simply too high. We do, however, advocate for an approach that's more balanced than breathless about the scope and pace of changes, and how they can be managed by

working through the implementation and practicality facets of the disruption. Though these considerations don't get nearly the media attention as hyperbolic claims of unprecedented and all-encompassing impact, ultimately they're likely to play a much stronger role in whether business leaps over the technology chasm successfully.

The most pressing question to continue to ask ourselves is, how do we challenge the assumptions and showcase our expertise and sense making? What is our role to initiate and engage in research on both sides of the hype curve, neither solely as a concept is ascending (like conversational user interfaces or smart robots in Gartner's 2017 Hype Cycle) or descending (like autonomous vehicles or blockchain)? Do we have the courage to represent these issues through our practice and not by standing and watching, crossed-arms and disapprovingly as the trains of progress pass us by? Advancing the discussion will also ensure that we explore technology's impact on organizations through credible and trustworthy research (Grand et al., in press). Whether advising or guiding work to implement new technologies, we can positively foster our recognition in the business community as capable advisors.

We'd like to hear from you! What recent trends have you seen in industry that you believe are hyped and overstated? Which technology risks are underrecognized? What technologies do you see just starting to emerge within organizations and warranting proactive, prescriptive research? Contact or follow us on the below social channels:

LinkedIn: Evan Sinar & Tiffany Poeppelman

Twitter: @EvanSinar & @TRPoeppelman

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I-Opener: Dress for Success (What? Why?!)

Drake Doumit and Steven Toaddy
Louisiana Tech University

Editor's Note: This column explores an issue that may seem superficial on its face. Yet, for many, the issue of how to dress at work comes with layers of economic, social, racial, religious, and gender context that make it a difficult and stressful decision. The I-Opener columnists do a good job of acknowledging that their perspective is limited to their own experience. I encourage you to share your own experiences as well.

Work settings are associated with a variety of informal and formal dress codes—everything from casual Friday to presentation attire—but we (our field and cognate fields) don't seem to have a good reason to have such codes. That is, why do people go to a different part of their wardrobes when they go to work than when they go out in public otherwise? As an evidence-based, practice-heavy field, this state of (thus-far-) unjustified guidelines, which constitute at least a cognitive burden on and perhaps additionally a financial burden on (and contravention of individual expression for) individuals, is unsettling to us. We strongly believe that these burdens have real negative impact on people's experiences at work, especially for those whose lack of social or economic privilege prevent them from challenging such codes. Without empirical support for their use, such dress codes are truly worrisome to us. So why are they in use?

As is the pattern in this column, we turned to some SIOP members for their insights. We fully acknowledge that this sample of perspectives does not cover the range of unique experiences people may have with dress codes at work but hope that this narrow peek into the dress code world of I-O is of some interest to you. We aim for this piece to be the beginning of a continued discussion on workplace dress codes and wish to bring more perspectives to the conversation in the future.

A few caveats:

1. This is an unscientific approach to the topic. Enjoy the irony.[1]
2. We reached out to a bunch of people and heard back from fewer than is typical in these circumstances. We also offered to protect the identities of all respondents. We respect that sticking one's neck out here may be uncomfortable or dangerous and that we did little to assuage such danger (and are writing from a biased stance). ::shrug::
3. There is research on attire in the workplace/interviews (Adomaitis & Johnson, 2005; Barrick, Shaffer, & DeGrassi, 2009; Forsythe, Drake, & Cox, 1984; Galin & Benoliel, 1990; Karl, Hall, & Peluchette, 2013; Karl, Peluchette, & Hall, 2016; Peluchette, Karl, & Rust, 2006; Vilnai-Yavetz & Rafaeli, 2011; Warhurst & Nickson, 2007), but it is largely useful in answering questions of what attire's effect is, not whether attire should be a thing. Think, for an analog, of research on the impact of applicant physical beauty on interview performance—we appreciate, from empirical research, that it is a thing, but our reaction tends to be trying to lock down the interview process to avoid this bias, not incorporating cosmetic surgery and cosmetics recommendations into our consultancy portfolio. In the end, the research that has been done doesn't help, in our opinion, answer the question of "why do I-O people tolerate dress codes?"

4. We asked one question from many possible ones; specifically, we asked our respondents to reflect on the dress codes that are in effect (explicitly or implicitly) at *their* places of work. We did this not because we were actually interested in those dress codes (though we did get some interesting tidbits out of those) but rather because we wanted to follow up on that question with two paths of follow-up considerations:
   a. If you are responsible for setting these codes, do you have any justification for doing so? If so, is that justification scientific? If not (to either question), how do you countenance setting the codes?
   b. If you are subject to these codes, how do you, as a member of a field that researches such things (and thus as, more than the vast majority of other professionals, a candidate for dissonance about the lack of justification for the same), you know, *feel* about them[2]?

Are There Dress Codes for I-O Folks?

Though, as we said, we're more interested in the "why" than the "whether," if there are no dress codes (explicit or implicit), we're barking up the wrong tree. So?

- An I-O psychologist at a large national retailer (hereinafter "Retail") reported that, at their hippy place of employment, people come in in shorts and flip-flops and have a very lenient dress code. They note that at their retail locations (i.e., not the place of employment for most I-O folks), the dress codes are lenient—focused on not promoting outside companies and wearing necessary safety equipment.
- An academic (hereinafter "Academic") shared that their code was quite formal/professional, with most men wearing a suit[3] and women wearing dresses or pants/blazer; rarely does one see jeans, t-shirts, or sweaters.
- **Anthony S. Boyce**, partner in Aon's Assessment, Selection, and Leadership practice, was the first to explicitly point to a "policy" (viz. Business Casual) but noted that his office is veering towards Smart Casual.[4]
- **Robert Hogan**, PhD, President, Hogan Assessment Systems,[5] noted that, before 2000, his organization would expect coats and ties during client visits but that this has stopped, partly because clients have dressed down so significantly. Presently, they leave people alone regarding dress code as long as those people perform well; this results in a variety of levels of concern about appearance.

Okay, so everything from pretty much no dress code (Retail) to business casual/Smart Casual (Boyce) to fairly strict formality (Academic), and then a shop where people are all over the map (Hogan). Notably, some folks reported casual Fridays and the absence of any policy/expectation for offices that have no client contact, so there's nuance here as well.

Why Are There Dress Codes for I-O Folks?

Two major categories of answers here:

- Culture/tradition. Academic pointed out that there is nothing explicit about their dress "code"; it's just a practice carried out by others. Hogan described an intriguing system of status hierarchy, dress rules, maturation, and the distinction between informality and slovenliness (viz. that what many call casual he sees more as slovenly); this deserves its own separate treatment but is largely beyond the scope of this column; ask Hogan.[6]
- Instrumentality. Retail pointed out that the only regulation was to wear nothing offensive[7]; Boyce and Hogan both pointed to wanting to demonstrate to clients that the I-O folks deserve

the clients' money (Boyce)/the I-O folks need to look like adults to visit clients (Hogan); Academic teaches students (who dress formally) and would find it inappropriate to teach in sneakers or jeans.

Notably, our respondents didn't point to any theoretical/empirical work as a justification; though academic points out the work that indicates that formal attire leads to positive social outcomes, *this doesn't seem to be the basis for the setting of these codes* (at least according to those with whom we spoke). Academic also pointed to fashion trends, which (a) are beyond our area of expertise and (b) may explain the specific cut of a suit that a consultant wears but don't, in our opinion, explain why the consultant is wearing a suit in the first place.

What of the Trend Toward [Casual][8]?

Boyce points out that society in general is trending away from formality, be it in language, silverware, or, you know, attire. Hogan has resorted to picking his battles; those folks in research, IT, and marketing he has given up on because they, largely, can't embarrass him in public, while he will take it upon himself to cart off promising consultants to a tailor in Tulsa to get them appropriate business attire so that they won't feel embarrassed in front of high-profile clients. Retail, who used to be subjected to formal dress codes but is no longer, is all about the trend toward informality.[9] Academic, who operates within a formal workplace, thinks that people should be able to wear whatever they want as long as they are dressed appropriately[10] and thus thinks that the trend toward casual is a good one.

Concluding Thoughts

The "*Why*" section, above, carries the core of the content here. Here's why: It is our presumption/assertion that I-O advocates for basing practices in theory and/or evidence. We assume that this advocacy points inwards as well—that is, that I-O thinks that I-O should use I-O to do I-O.[11] Workplace-attire policies, as far as we can tell (as far as these folks reported), are not examples of such evidence-based practices, however. They *could* be, at least partially; if our respondents had said "well, the science indicates that a consultant in a suit gets X% more from a client than a consultant in cargo shorts," that would be something. We (the authors) still wouldn't be satisfied, as this would be comparable to "a consultant with a lucky rabbit's foot" or, troubling for an additional reason, "a white male consultant." We want to know not only *that* it works but also *how* it works, and as far as we can tell, our field simply isn't there yet.

But recall, we didn't see that answer. Folks reported instrumentality (wowing clients, showing respect; even Retail indicated that few would wear Birkenstocks to a board meeting) and culture/tradition, but even the instrumentality was based on culture/tradition (not on science—even on what is available—and particularly not on good theoretically anchored, causally descriptive science).

This topic is interesting to us for several reasons: because there is room for theoretical and empirical scientific work here, because arbitrariness (or tradition) rub us the wrong way, and because this is an actual, costly, inconvenient thing. Retail points out that they worked in a hot climate where pantyhose and suit jackets were (variously) required. In a previous I-Opener, the author reported some preliminary information about the cost of professional (above and beyond ordinary) attire for graduate students.

Despite these inconveniences, employees and students are incentivized to conform to whichever dress code their organization's culture dictates. Choosing not to dress like one's peers may not result in formal reprimanding but could create an uncomfortable work environment for someone who doesn't feel like they fit in. Those who are uncomfortable with or inconvenienced by dress codes are left with a choice of bearing the cost of conforming or facing the negative consequences of not doing so. This pressure to conform can diminish diversity and discourage inclusivity in the workplace. In our opinion, those are valuable things to give up for seemingly arbitrary policies. There are other reasons, personal expression, evidence of individual uniqueness, and of course a long discussion about why we wear casual clothing outside of work (rather than suits, if we like them so much), but we're running out of space here. As usual, we ask the reader:

> What do you think?
> Does your experience match with those upon which we reported here?
> If you have any, are your dress-code particulars justified?
> Are those justifications based in science?

Notes

[1] Irony in the sense that the lack of scientific evidence for dress codes is bothering us, not in the sense that the I-Opener tends to be a result of science—which, for the record, it doesn't.

[2] The length of each of these four numbered points (including associated subordinate points but excluding citations) can be modeled perfectly by the equation $y = 12 + (x-1) * 48$, where x indicates the number of the list element and y is the number of words in that element. You thought that we were haphazard and extemporaneous in our writing. I mean, you're mostly right.

[3] But with no tie! Liberty, sweet liberty!

[4] No t-shirts or sneakers, but nice jeans are okay.

[5] The only of our respondents who indicated that this topic was interesting to him.

[6] Seriously! As indicated, he's interested in this—it'll make for an engaging conversation (we promise). We are likely doing Hogan a disservice in watering down his thoughts/passion here.

[7] We chose to not dive down that particular rabbit hole.

[8] Hogan would be resistant of our characterization of dress codes/trends moving toward "casual" attire, we suspect.

[9] ASA, anyone?

[10] YMMV.

[11] "I-O, I-O, get dressed for work, let's go!" Get it, because it takes longer to put on dress clothes?

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SIOP in Washington: Advocating for I-O in Federal Public Policy

Jill Bradley-Geist, University of Colorado Colorado Springs, and Bill Ruch, Lewis-Burke Associates LLC

Since July 2013, SIOP and Lewis-Burke Associates LLC have collaborated to make I-O science and research accessible to federal and congressional policy makers. SIOP has embedded a foundational government relations infrastructure within the organization, enabling SIOP to develop an authoritative voice as a stakeholder in science policy in Washington, DC and to promote SIOP as a vital resource for evidence-based decision making.

SIOP Weighs in on the Importance of Forensic Sciences
On August 4, SIOP joined several other scientific societies to sign on to a letter to leaders of the House and Senate Appropriations Committees, urging them to reject deep cuts to forensic science research at the National Institutes of Standards and Technology (NIST) that were proposed by President Trump's fiscal year (FY) 2018 budget request. NIST is the federal government's foremost agency for forensics research and the coordination of standards among law enforcement and scientific communities, and has recently supported I-O research as it relates to the topic. By signing on to this letter, SIOP is joining fellow leaders in the scientific community to protect these critical investments.

NIST has shown particular interest in funding projects that examine the workforce needs of the forensic science field. In July 2016, the agency sponsored a workshop, convened by the Board on Human-Systems Integration (BOHSI) of the National Academies of Sciences, Engineering, and Medicine (National Academies) that brought together I-O psychologists and members of the forensic science community to review the "current status of selection and training of forensic scientists who specialize in pattern evidence" and discuss "how tools used in I-O psychology to understand elements of a task and measure aptitude and performance could address challenges in the pattern evidence domain of the forensic sciences." Numerous SIOP members directly participated in the workshop. A report summarizing the workshop's findings can be found on the National Academies' [website](#).

National Academies Releases Report on Social Sciences
On July 19, the National Academies of Sciences, Engineering, and Medicine (National Academies) released a report prepared for the National Science Foundation (NSF) entitled *The Value of Social, Behavioral, and Economic Sciences to National Priorities*. The report follows a 3-month evaluation process conducted by National Academies experts at the request of House Appropriations Subcommittee on Commerce, Justice, and Science (CJS) Chairman John Culberson (R-TX). The report concludes that social, behavioral, and economic sciences research programs supported by NSF demonstrate clear positive societal impacts corresponding to national priorities. The report's findings are presented through numerous examples of key outcomes from NSF-funded research, and several of the examples include strong I-O psychology-based concepts and themes.

NSF collectively funds approximately 60% of the federal social science research portfolio. These projects are largely overseen by the Foundation's Directorate for Social, Behavioral, and Economic Sciences (SBE), which sponsors several projects that support SIOP researchers and practitioners. Some examples of NSF-funded projects featuring I-O psychology concepts mentioned in the report include studies on the development of crew resource management (CRM) training programs to promote safety and efficiency in airlines and other industries, aging in the workplace, and the transition from welfare to work. The National Academies' inclusion of these findings demonstrates the importance of federally funded I-O research for the advancement of national priorities.

The report concludes by providing recommendations for future social, behavioral, and economic sciences research programs at NSF and encourages NSF to more clearly and deliberately communicate the unique value of this research to the public moving forward. It also encourages NSF to continue its investments in multidisciplinary or team-based scientific research that would combine aspects of social, behavioral, and economic sciences inquiry with applied scientific discovery priorities. Finally, it encourages NSF to routinely evaluate trends in scientific research to ensure the continued value and applicability of this research to national science priorities and to invest in training the next generation of scientists to work effectively in team-based, multidisciplinary research groups.

A copy of the report can be found **[here](#)**.

SIOP Members Spotlight: Policy on Workers With Disabilities

> *In our current* TIP *feature of SIOP members engaging in government advocacy work, Peter Rutigliano. To tell us about your own advocacy-related work, please contact current Government Relations Advocacy Team committee chair, Jill Bradley-Geist: jill.bradley-geist@uccs.edu.*

Peter Rutigliano (Mercer-Sirota) presenting at a National Organization on Disability (NOD) event in Washington D.C.

Pete Rutigliano first became involved in advocacy through his work at Mercer|Sirota, where he is responsible for managing a large multiorganizational employee engagement survey database. Back in 2006, Pete worked to add items to the survey inquiring about disability status. After 3 years of data collection, a strong pattern emerged: Employees with disabilities (EWD) scored significantly lower than their peers on engagement and other items measuring positive work experiences. These differences became more salient when compared to other demographic groups. The initial results indicated this was an issue that required more investigation and attention.

Through a relationship with a colleague, Pete joined up with the National Organization on Disability (NOD). For 30 years, the NOD has been helping organizations build a more disability inclusive workforce. A partnership was formed to mutually publish and present Pete's results to increase awareness of the need for more work in this area. Through our join effort, we regularly presented to clients, the conference board, invited presentations, conferences, and so forth. During this time, Pete continued to grow the benchmark database to almost 2 million records.

The NOD has always leveraged strong connections with the federal government to advocate for People with Disabilities (PWD). For instance, former Secretary of Homeland Security Tom Ridge is the chairman and a long-standing member of the NOD Board of Directors. In 2013, the NOD presented to Deputy Secretary of Labor Seth Harris on the state of employees with disabilities, showing a need for more government intervention in this area. This led to a call to action to change some of the laws regarding the treatment of PWD in the work place to ensure more was being done to create an even playing field for this group. In September 2013, Carol Glazer of the NOD, along with several other organizations representing the needs of people with disabilities, met with President Barack Obama to discuss what steps could be taken. During the meeting, Carol presented much of the Mercer|Sirota data gathered by Pete showing the disparate experience for PWD. As a result, in March 2014, the Department of Labor's Office of Federal Contract Compliance Programs revised Section 503 of the Rehabilitation Act of 1973, changing regulations for [federal contractors](#) to specifically prohibit the discrimination of PWD and strengthen affirmative action provisions, including a nationwide utilization goal of 7% of all employees in organizations be identified as having a disability.

Carol Glazer (National Organization on Disability) presenting to President Barack Obama in 2013.

Lost in Translation: Verbally Communicating Reliability and Validity Evidence

Michael Litano
Old Dominion University

Stop me if you have heard me say this before: The scientific study of people is complicated. People vary in almost every imaginable way; from physical (e.g., height, weight) to psychological (e.g., intelligence, personality) characteristics. These individual differences help us understand why people behave in certain ways. Given our mission as I-O psychologists to describe, understand, explain, and ultimately predict variability as it pertains to people in the workplace (Cascio & Aguinis, 2011), it is essential for us to be able to accurately and reliably measure these individual differences. Our jobs would undoubtedly be simpler if we could rely solely on objective measurements of physical characteristics. However, decades of research suggest that it is the unobservable phenomena that is most predictive of employee behavior – particularly in complex and knowledge-producing jobs (e.g., cognitive ability, traits; Hunter & Hunter, 1984; Ree & Earles, 1992; Schmidt & Hunter, 1998). Therefore, we are often tasked with measuring psychological phenomena that we cannot directly see or objectively measure.

I-O psychologists use several techniques to measure the unobservable phenomena that influences human behavior. But how do we know that we are accurately and reliably measuring constructs that we cannot observe? Personally, I like to think of myself as a prosecutor whose goal is to provide evidence beyond a reasonable doubt that I am measuring the constructs I intend to. Instead of collecting DNA and disproving alibis, I must provide evidence that demonstrates my assessment to be reliable and valid. This practice is generally well-accepted in academia and among scientist–practitioners but less so in the business world, not because reliability and validity are any less important, but because effectively communicating their value to unfamiliar audiences can be challenging.

In the applied world, I have encountered many opportunities to communicate the importance of reliability and validity. Despite some successes, I have also occasionally found myself to be lost in translation. How do you explain to someone who has not been trained in I-O that using one single rater to codify comment themes may not result in trustworthy data? How do you tell a hiring manager that using structured interview questions based on a job analysis will help make better hiring decisions than if he or she were to ask their own? How do you walk into a company that has used the same employee survey questions for the past 20 years and explain that they may not be measuring the constructs that they are intending to? The psychometric properties that we understand to be foundational to people measurement can seem like foreign concepts to non-psychologists. Thus, I interviewed three experienced and esteemed I-O psychologists to understand how they verbally communicate reliability and validity evidence to non-I-O audiences in simple and easy-to-understand ways: SIOP President **Fred Oswald**, **Jeff Jolton**, and **Don Zhang** (see biographies below).

This column differs from previous *Lost in Translation* articles in that it focuses on what these I-O professionals say when describing what reliability and validity are and why they are important. This contrasts with past columns that have focused more on how one should prepare for their translation experience and the intricacies of specific situations. My hope is that this shift in focus will provide graduate students, early- and mid-career professionals, or anyone who finds themselves "lost in translation" with a set of resources that help individual I-O psychologists develop their translation skills, and in doing so, builds the awareness and use of I-O psychology in organizations.

Each of the experts provided unique examples of how they communicate reliability and validity evidence. Dr. Oswald emphasized the importance of setting the foundation for your translation experience and communicated each topic using terminology that any audience can understand. As a practitioner

with significant applied experience, Dr. Jolton described how he communicates reliability and validity differently depending on whether his client is interested in selection or surveys. Finally, Dr. Zhang provided relatable analogies and narrative examples that simplifies the translation experience.

Preparing for Your Translation Experience

Before diving in to the translation examples, I wanted to highlight Dr. Oswald's advice on preparing for your translation experience (see column 2 for additional preparation advice). He emphasized two points. First, we need to be aware of our cognitive biases. Specifically, our deep expertise leads to a "curse of knowledge" that occurs when communicating with non-I-Os that leads us to incorrectly assume that they have the background to understand some of the complex topics in our field. Second, and to overcome this "curse," we need to have preliminary conversations with our intended audience that helps us understand their goals, perspectives, and base levels of understanding. Setting up this groundwork for translation is essential; in many cases, your audience may not know why they need to care about reliability and validity—or any other I-O topic.

Reliability

Broadly speaking, reliability concerns whether a test or assessment is dependable, stable, and/or consistent over time. Given that we are unable to objectively measure most psychological constructs of interest, there is inherently error involved in what we are trying to assess. An estimation of a measure's reliability provides the user with information on how much of the variability in responses are due to true individual differences and how much of the variability is due to random error. It is easy to find yourself lost in translation when communicating the importance of reliability. On one hand, describing the "stability" or "consistency" of a measure can seem too simplified: Will the end user understand *why* having a dependable measure is important? On the other, it's easy to get too technical when explaining the implications of having an unreliable measure.

> **Jeff Jolton**: A part of the conversation is geared toward who my audience is. When dealing with selection, I tend to get a little more technical, whereas on the survey side, it doesn't have as much legal ramification. In general, I describe reliability as how consistent our measurement is, either over time or within the construct. If a measurement doesn't show consistency over time and in what constructs they are, then it cannot be a good predictor because it may change next time. Reliability is a necessary component for us to build an analysis or interpretation. It's basically junk if it's not reliable because it will measure a different construct next time.

> **Don Zhang**: If you want to know something about a person's physical characteristics, such as his or her weight– you can use a bathroom scale to measure how much that person weighs. A good bathroom scale should give you consistent results every time you step on that scale (assuming we have not lost or gained weight). In psychology, we are trying to measure more elusive characteristics such as personality, interests, et cetera, and we have to settle for a less precise scale than the bathroom scale. In those situations, we use surveys or expert judges to measure characteristics that we cannot see. But our measurement instruments function very similarly. Like a bathroom scale, we want our psychological instrument to produce consistent results every time, which is a lot more difficult. Our job is to create the most accurate scale as possible even though we are trying to measure more elusive things. If you want to know something about employees, you should use an accurate and reliable scale. You wouldn't trust your bathroom scale if your weight changes by 20 pounds every other day, would you?

Fred Oswald: Reliability essentially helps us understand whether a test measures what it should. To figure out whether a test measures conscientiousness, for example, we can analyze the conscientiousness items to see whether they "behave" in ways that we would expect if they all in fact measured conscientiousness.

For instance, conscientiousness items should all "stick together" (or positively correlate) because they all measure the same underlying theme (or construct) of conscientiousness. When this is true, then *internal consistency* statistics like Cronbach's alpha should be high. *Alternate forms reliability* tells us that conscientiousness items across tests will also "stick together"—so long as all of those items measure conscientiousness. If Dr. Oswald and Dr. Litano create two tests that are different, yet they both measure conscientiousness well and in a similar way, then they should correlate positively.

Conscientiousness items should not only stick to one another, though—they should also "stick together" over time. After all, the whole reason for testing the conscientiousness of candidates in preemployment testing is that it is a stable measurable trait and a useful indicator of job performance, even after candidates are hired. In other words, your score or standing on a conscientiousness test should be roughly the same no matter when you took the test. This fact shows up as high *test–retest reliability,* where people have a similar standing on conscientiousness regardless of the time that they are tested.

As the names imply, *interrater reliability and agreement* involve the consistency or convergence of raters instead of items. Raters are treated like items of a scale, meaning that good raters should also "stick together" between each other and over time. Interrater reliability means that people's ratings to have the same rank order. Interrater agreement means that people's ratings converge on the same value for a given person being rated. Usually we want agreement in the selection setting.

Imagine that interviewers are interviewing a set of job applicants and rating them on their conscientiousness. If there is high interrater agreement, then the raters will "stick together" and give each applicant a similar rating. The more interviewers you have providing ratings, the more accurate the mean ratings become, similar to having more items leading to a more reliable measure. If you are trying to convince managers that they need multiple raters, ask them if they could flip a coin only once to determine whether it's a fair coin. We have no idea until we flip the coin repeatedly and gather more data. Likewise, we need multiple raters to establish solid interrater reliability and agreement.

One last thing to add is that everything I've said so far refers to overall reliability for multiple items, or overall agreement for multiple raters. There are ways to analyze individual items or individual raters in a more refined way to determine whether they "belong." This is helpful in cases where managers or support staff have the opportunity to refine or replace items, or retrain or replace raters. Statistical tools like factor analysis and item-total correlations are the analyses that help us in the case of items, and there are similar tools available for analyzing raters.

Validity

We are well-taught that reliability is a necessary but insufficient characteristic for a measurement instrument to be useful. Ultimately, we are concerned with obtaining accurate measurements of unobservable constructs, and using those measurements to predict human behavior and other meaningful outcomes. At the highest level, validity concerns what an assessment measures, how well it measures it,

and whether it predicts what it is supposed to. But demonstrating validity evidence can be a time-consuming and rigorous process, and a wise I-O psychologist once told me that senior leaders want their solutions to be delivered quickly, cheaply, and in high quality – but you can only have two. Given these constraints, I turned to the experts to understand how they effectively communicate what the different types of validity evidence are, and why they are so important in people measurement.

Jeff Jolton: From a practical perspective, validity tells us if a scale is measuring what it's supposed to measure and predicting what it's supposed to predict.

Don Zhang: At its core, validity tells you if your instrument is measuring what you want it to. For example, if you want to measure height, you wouldn't use a bathroom scale, you would use a ruler. If you are the general manager of the New York Giants and you want to find the best college football players by assessing their athleticism at the NFL scouting combine, then validity looks at if the tasks at the combine is measuring a person's athleticism.

Content-Related Validity

Fred Oswald: In psychology, it is usually impossible to measure everything that represents complex job skills, employee engagement, teamwork, or other psychological constructs like these. You therefore should develop your items carefully. For example, say that you wanted to give carpenters a test of geometric knowledge. You probably shouldn't ask 10 questions about isosceles triangles and then forget to ask about other essential facts such as measuring perimeters or bisecting an angle. Content-related validity comes to the rescue here, meaning that measured test content should not only prove to be reliable and valid, but the content should cover all the conceptual bases desired, and in the desired proportions.

Even personality tests should consider content validity. If we were creating a measure of conscientiousness, we probably would want to generate a range of different items that cover all of its aspects (e.g., achievement, rule-following).

Don Zhang: Content-related validity answers the question: "Is the content of my test relevant to the construct we are trying to measure?" Using the NFL example from before, all the tests at the combine should be relevant to the construct of athletic ability. The 40-yard dash would be a better test than a hot dog eating contest because, in theory, speed is one aspect of athletic ability, and hot-dog eating is not. You also need to make sure all aspects of athleticism are measured: If you only use the bench press but do not ask the players to run, you are missing out on important aspects of a person's athletic ability. Psychological measures work the same way. If a survey is designed to measure conscientiousness, it needs to have all the items related to the concept of conscientiousness.

Construct-Related Validity

Jeff Jolton: You want to provide some evidence that we are measuring what we say we are. When measuring engagement, is our construct something that is aligned with other indicators of engagement? If I were to find a similar measure, would there be a meaningful relationship between them? If not, it gives me pause that I am really measuring the right things.

Fred Oswald: Construct-related validity is an umbrella term, covering any piece of information about whether a measure is "acting" the way it was designed to. Basically, it tells you whether the responses to a measure are expected or unexpected in terms of their relationships with sim-

ilar measures, with different measures, with group differences, and so on. Because there are virtually infinite ways to inform a measure, construct validity is a neverending process. Ideally, this gives many I-O psychologists some job security.

Don Zhang: Construct validity is the degree to which the instrument is measuring the construct it intends to measure. It's easy to look at the numbers on a bathroom scale and be confident that it is your *weight*. But if you get a 4.5 on a conscientiousness test, how can we be sure that the score reflects your conscientiousness and not something else? If you take a test on Buzzfeed called "what does your favorite Ryan Gosling movie say about your emotional intelligence", do you think the test results actually say something about your emotional intelligence? In order to determine a test's construct validity, we look for multiple sources of evidence: 1) does the test content *look* like it measures emotional intelligence? This is face validity. 2) does the test content cover all aspects of emotional intelligence, such as emotional awareness and control? This is called content validity. And 3) does the test results predict your behaviors in the real world? do people who score high on the test behave in more emotionally intelligent ways? This is called *criterion* validity.

Criterion-Related Validity

Don Zhang: [continuing with the NFL example] what we want to know is if a particular characteristic is related to the outcome of interest. Does athletic ability relate to success in the NFL? If they have nothing to do with each other, then we know that athletic ability is not important criteria when predicting NFL success. With a *correlation*, we could say that as people are rated higher on our measure of athletic ability, on average, their success in the NFL also increases. With a *regression*, we want to measure something about a person and use it to predict in the future. So this not only tells us something about the relationship between variables but also how well we are explaining that relationship. When you have multiple predictors [NFL example of bench press, 40-yard dash, etc.], it's important to understand whether the predictors are contributing new or unique information. So, can new information on a person make your prediction even more accurate? If you already know how fast someone runs a 40-yard dash, then additional information about his 100-meter dash probably wouldn't help you much more. *Incremental* validity tells you if new information about a person can improve upon the prediction of his performance based on what you already know.

Jeff Jolton: I never talk about it [as criterion-related validity]. Because I am usually working with employee surveys, I call it a business linkage study. Basically, our measure should be predictive, or should drive, certain business outcomes, such as turnover. We can also test to see if certain items are stronger predictors or if changes in something on the survey leads to changes in a business outcome over time. When talking about a custom assessment or selection, criterion-related validity becomes even more important due to legal defensibility. So, we take it the extra step to show people who score high on this assessment are more likely to be high performers in that role than people who score lower.

Fred Oswald: Criterion-related validity refers to the effective prediction of outcomes (criteria) of interest. Say that employees are measured on engagement, teamwork, satisfaction, job performance, and turnover after 6 months on the job. You go back to their HR files and find that they took a job knowledge test and a Big Five personality test. To the extent these tests predict these outcomes, they are showing patterns of criterion-related validity.

Our traditional linear regression analyses determine whether "bundles" of these tests predict an outcome, such as job knowledge and conscientiousness tests predicting job performance. This is more efficient than looking at the criterion-related validity of each test separately.

Big data is a modern example of criterion-related validity. For example, using big data analysis methods, you could predict how long a patient is going to be in a hospital given "X" information and then try to reduce hospital stays based on what you learn. Big data approaches are based on flexible models for prediction. Traditional concepts of reliability and validity that we just discussed should be no less important in the big data arena; but they need to be communicated to key stakeholders effectively (e.g., reliability helps boost the "signal in the noise" of big data).

As far as the prediction from regression or big data, when talking with people outside of I-O, I don't like to using the terms R square, correlation, or even variance. Instead, I'd rather show them a visual, like a 2D plot of actual outcomes on the y-axis and predicted outcomes (from regression or big data analysis) on the x-axis. Even a traditional expectancy chart can be effective here, where you plot an outcome's predicted values of an outcome against different levels of a predictor (maybe adding some error bars). Assuming that the outcome variable is meaningful to the organization, stakeholders can appreciate how the predicted outcome level increases with increases in the predictor. They can also see where the predicted outcome is above the midpoint or how predicted outcomes compare with the baseline (mean of the outcome, which is what you'd predict if you didn't have any predictors). This approach isn't as scientifically precise as presenting regression results, yet they can make regression much easier for others to understand.

Summary

As I-O psychologists, our goal is to describe, understand, explain, and predict human behavior. Achievement of that goal is dependent our ability to reliably and accurately measure psychological constructs that we cannot directly observe. To increase the awareness and use of I-O psychology, we (collectively, as a field) need to be able to effectively communicate why precise and dependable "people measurement" is so essential to evidence-based management. My hope is that the information provided in this article will serve as a resource to facilitate this translation, and I would specifically like to thank Fred Oswald, Don Zhang, and Jeff Jolton for sharing their expertise with the field.

What's Next for Lost in Translation?

Now that we have learned how to verbally communicate reliability and validity evidence from experts in the field, we will turn our attention to visually communicating these topics. Do you have unique and simple to understand data visualizations of validity evidence? Send me a note: michael.litano@gmail.com. I would love to feature your examples in the next column.

Some exciting news for *Lost in Translation*: A SIOP 2018 panel discussion based on this series was accepted as a Special Session by the SIOP Executive Board. Come see us in Chicago to learn more ways to effectively communicate the value of I-O to non-I-O audiences!

Interviewee Biographies

Fred Oswald is current president of SIOP and professor in the Department of Psychology at Rice University, with research expertise in measure development, psychometrics, big data, and personnel selection systems. For more information, see www.owlnet.edu/~foswald

Jeffrey Jolton is a director with the People Analytics and Survey practice within PwC, working with a variety of clients on their employee survey, lifecycle measures, talent assessment, and change efforts. He has worked with a number of For*t*une 500 companies across a variety of industries on projects related to building employee engagement, understanding the employee lifecycle, shaping organizational culture and work experience, assessing leadership competencies and capabilities, and other aspects of employee-related analytics. Jeff received his master's and doctoral degrees in Industrial and Organizational Psychology from Ohio University. He can be reached at: jeffrey.a.jolton@pwc.com

Don C. Zhang is an assistant professor in the Department of Psychology at Louisiana State University. He received his PhD from Bowling Green State University. His research focuses on decision making, statistical communication, and employee selection. He is particularly interested in why many managers are reluctant to use evidence-based hiring practices such as structured interviews and mechanical data combination methods. He can be reached at: zhang1@lsu.edu

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TIP-Topics for Students: What to Expect When You Are Applying: Advice From Current Students and Faculty

Stefanie Gisler, Bradley Gray, Jenna-Lyn Roman, and Ethan Rothstein Baruch College and The Graduate Center, CUNY

Whether a professional working in the field, a professor on the cutting edge of research shaping the minds of future generations, or a current student forging your own path, it all starts with the same first step: an application to graduate school. Since many readers will be applying to programs in the coming months, we asked current students and faculty members from a variety of programs for anonymous feedback on what faculty and graduate students look for in prospective students, as well as for any information or advice they wish they knew before their own application experience. Contributors shared knowledge gained from their own personal application process, as well as what they learned from going through the application and selection process of new students entering their programs.

The idea for this article came about from our own application experiences, as well as from discussing career plans with junior and senior-level undergraduate students. There was overwhelming agreement from past, present, and future applicants regarding feelings of fear and confusion about what is expected, so we hope this article will help dispel those feelings to some extent. That being said, SIOP's website presents information for 113 master's and 71 PhD I-O Psychology programs in the U.S., and each program is unique.[1] By no means are we able to provide a singular resource of information about the expectations of all programs for prospective students, as no two programs go about the application process in the same way. Instead, we hope that the information we have consolidated here provides a fresh and beneficial perspective to those who seek it. Based on the responses we received, we share feedback regarding expectations about research experiences before applying, the application with emphasis on the personal statement, and last, advice on how to find the best sense of fit with a program.

Prior Research Experience

How much previous experience in I-O is necessary to get accepted into a program? While work and research experience may not be a requirement, students and faculty alike feel that the more you have the merrier. Though some faculty praised applicants with the ability to achieve academic success while working a part-time job, overall, faculty members placed far greater value on research experience than work experience. Faculty members endorsed the old adage that the best predictor of future behavior is past behavior, stating unequivocally that having prior research experience plays a strong role in getting accepted. Indeed, many indicated preference for students who essentially appeared like they were already graduate-level students during their undergraduate career: doing research, working on projects, actively engaging and contributing in class, and completing all coursework, just as they would be expected to do as a grad student.

A distinction came up regarding research relevancy. Overall, faculty said they place more emphasis on the analytical skills that students gain from past research experience than on the subject or results of the student's research. Although research relevance can be important when discussing program or advisor-level fit, research interests may change, but the research skills remain. Students from a variety of research backgrounds or who transferred to I-O from different specializations (e.g., Clinical, Social, or Cognitive master's programs) affirmed that their past focus did not hinder them from being accepted or succeeding in an I-O program. To this point, if you still have time, get involved as a research assistant at your university, in your community, or with a research facility. Reach out to professors doing research that interests you and see how you can become involved, because the experience will be invaluable not only in building your skills, but in giving you a preview of the graduate student experience.

Multiple faculty members and students also highlighted the importance of having intellectual curiosity. As one faculty member described it, you may have research skills, but without the motivation to think critically, question research, and critique, it will feel like you are disinterested and must be dragged through the research process. This does not mean that applicants should apply with their theses and dissertations already planned (though that would be impressive) but that they should at least be prepared to discuss an area or topic they want to pursue beyond simply "Industry" or "Organization," and be willing to ask questions. Part of graduate school and professional work in the field is constantly learning and applying the scientific method, so a strong intellectual thirst is a necessity to get accepted into a program and to succeed in general.

The Application and the Personal Statement

The typical program application involves submitting a form unique to the school's psychology department or graduate program, as well as GRE scores, a personal statement, transcripts from past schools,

letters of recommendation, and a CV/resumé. Some programs are not abundantly clear about their application requirements to the point that it seems like finding out how and with what to apply is part of the application process itself. But, as the applicant, you will be solely responsible for completing and submitting all documents. One student mentioned a "rule of threes" when applying to schools: three safety, three good fit, and three reach schools. Others indicated that they had a budget for application fees and decided based on that. Regarding applications in general, students recommended being organized and tracking all of the requirements, due dates, and online forms for each of the schools to which you apply. The majority of advice regarding the application focused on creating the personal statement, so we have centered on that.

Current students described their doubts about what to include or not include in their personal statements. In general, a statement expresses how and why you are interested in pursuing a future in I-O, the faculty with whom you would want to work, and why you are applying to the given program. The personal statement provides the greatest opportunity to explain who you are and how you arrived at this place in your life. It should be unique to you, in active tense, and lacking generic explanations of your interests or experiences. One faculty member gave the advice that applicants should read each paragraph they have written out loud to someone and discuss the following questions: "What am I trying to convey with this? Does this do it? Is there a better or clearer way to do so?"

Other suggestions about the personal statement answered specific concerns applicants may have. For example, should you mention if you want to go into academia or applied upon graduating? Current faculty stated that applicants do not need to indicate this in their personal statements and that it is not unusual for students to be unsure. Thus, even being undecided is safe to admit, and you can mention your desire to join an environment that provides opportunities to develop your interests so that you can make that decision upon leaving the program. However, you should not ignore the nature of the audience to whom you are applying. For example, it could be unwise to write that you wish to go the academic route or are undecided when applying to a program where that is not the focus, such as programs where students have no teaching opportunities beyond a 4th and 5th-year teaching assistant position or from which the vast majority of students do not go into academia.

Another point of contention was whether to express interest in one faculty member or two. Although some students said to choose a single person, as incoming students will be paired with that individual for the next 2–5 years, others said to mention a primary and secondary faculty member. Faculty members may be on leave, may not be taking students that year, or may have changed their focus and no longer research what you are interested in, so having multiple interests and mentioning two professors will be fortuitous in these circumstances. Again, it is suggested to consider the nature of the program to which you are applying. For some programs, it is indeed the case that incoming students work in one research lab for the full length of their studies. Other programs utilize a multiple-mentor model in which students are encouraged to work with more than one faculty member, and the application may tell you how many faculty members to pick.

Some final suggestions from faculty and students are to be sure to explain why you are interested in I-O, to explain you are interested in pursuing psychology even if not specifically I-O, and to be sure to express why you are applying to the given school instead of another. On this final point, a faculty member stated that applicants do not need to know when the school was founded or anything like that, but they should at least know who faculty members are and what their current areas of research are. Additionally, some answers here are not going to be seen favorably; though willingness to move to or live in an area is important, saying "I applied here just because I really want to live in the area!" is likely not going to score your application any brownie points.

Fit

The majority of feedback we received regarded achieving the greatest sense of fit. This included important questions for applicants to consider both before applying and during the visitation/interview process. Fit was considered in relation to a faculty member and to the program in general.

Regarding fit to a faculty member, as previously mentioned some programs are organized such that you apply to work with one faculty member for the entire time you are a part of the program. This faculty member will have a strong influence on your career, both during and after the program. If you do not like this faculty member, or are not committed to their area of research, then your well-being while in school and future career can suffer. Current students recommend paying attention to recent publications to verify the faculty member is currently studying things you have an interest in and to ask current students about that faculty member's mentoring and researching style. Ask yourself if this aligns with what you want or if it is what you need to grow. The greatest opportunity to ask these questions will be during a visitation period. Though you can also ask informally by contacting current students before visitation, these responses may be less candid. Aside from that, to the extent it is possible, either have another advisor in mind to transfer to if necessary or choose programs that encourage having multiple mentors. Interests can change or experiences will inform you of what you do and do not want to do, so diverse opportunities are important.

Regarding fit to the overall program, there are many considerations. Again, try and get a feel for the program either during a visitation period, or if possible, by contacting students or during an informal visit. Some people prefer competitive programs, whereas others like more collaborative environments. You can get a feel for this by asking students and faculty, by how students interact with one another during a visit, or by looking to see how many students publish or present together. Current students recommend asking yourself where you want to be in 5–6 years and considering whether the program you are considering will get you there. Then, ask questions to current students and faculty based on what you determine. Look at what alumni are doing if that information is available. Do they work for companies you would want to work for or do the type of work you would want to do? Do the courses match your interests? Do you get internship experience or help before or while on the job hunt? Faculty and students alike recommend preparing questions before you arrive (ask Google if you need help coming up with a list of questions). Students say to not worry about asking multiple people the same question, as different perspectives can help you form an opinion. Additionally, just as showing intellectual curiosity in the personal statement is important, it is essential at this stage as well. Appearing disengaged and not having any questions can make it seem like you are not interested in the program. This presents a disadvantage for those who are introverted or nervous interviewees, but prepare questions, listen actively, and be sure to express your interests clearly. Additionally, one student recommended going as far through the admissions process as possible before ruling a school out, noting that you may discover something through the interview that has a significant impact on your overall preferences.

Finally, there are other important issues that may or may not influence your sense of fit. These include issues such as money, location, and time investment. Some students said that money should not influence your decision and that a more expensive but better fitting program is a worthwhile investment, but for others, funding was an essential part of the decision. The stipend and tuition remission can make or break the decision for students with too many outstanding loans from their undergraduate education or for international students who are unable to work or take out loans at all. Applicants must also consider the location of a school and what that offers. Determine if you can see yourself living there, and note that opportunities provided during and after your program may be in that same area. Although location, time, and money should not be the only deciding factors, for some students, they cannot be ignored.

Conclusion

Give yourself plenty of time to apply. Do not leave everything until November, stay organized, and you will have no problem completing applications on time. Graduate school programs are difficult and time consuming. Know your weaknesses and shortcomings, be prepared to work hard, and know or learn how to cope with stress. Even so, they are an enriching experience and are integral for shaping the future of I-O psychology. We all appreciate the opportunity to be taking part in our program and hope that soon many of you will appreciate your new schools too. We wish each of you luck on your applications and look forward to meeting some of you at visitation day!

Notes

[1] The SIOP database lists information from all schools that have submitted forms to the SIOP Administrative Office. It should not be considered a comprehensive list.

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Stefanie Gisler is a PhD student at Baruch College and The Graduate Center, CUNY. She received her BA from Bucknell University and an MS in I-O Psychology from the University of Central Florida (UCF). Her research interests include occupational health psychology, diversity, and selection. After earning her PhD, Stefanie would like to pursue a career in academia.

Bradley Gray is a PhD student at Baruch College and The Graduate Center, CUNY. He obtained a BA in Psychology from Wake Forest University in 2010 and an MA in Clinical Psychology from Towson University in 2012. He researches occupational health psychology, with an interest in the relationship between supervisors and their employees, and is also interested in culture change and executive development.

Jenna-Lyn Roman
Jenna-Lyn is an MS student at Baruch College, CUNY. She received her BA in Psychology from the University of South Florida. She is interested in work–family research with an emphasis on nontraditional workers and understudied populations (i.e., military families), and gender. She intends to complete her thesis project and apply to PhD programs during the coming academic year for an August 2018 program start. Jenna would like to be a university professor specializing in work–family topics.

Ethan Rothstein is a PhD student at Baruch College and The Graduate Center, CUNY. Ethan obtained his BA in Clinical Psychology from Tufts University in 2013. His primary area of research has been the interface between work and family, but he has also conducted research on motivation, leadership, team processes, and occupational health psychology. After he graduates, Ethan would like to pursue an applied career in both consulting and industry.

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On Reminding Yourself that Everything (Truly) Is Fine

Allison S. Gabriel
University of Arizona

I skipped writing an article for the July 2017 *TIP*, and that was intentional. When **Morrie Mullins** approached me back in 2014 to write this column, he told me that he wanted me to write about my experience as an assistant professor—the good, the bad, and the in between—and I like to think that thus far I've held up my end of the bargain. By and large, as I read back columns I've written, I can hear my voice in all of them, and I hope that the things I'm saying are not only helpful but also a realistic view into my experiences and various thoughts thus far in my career. But, when I was writing my July 2017 column, I realized that what I was doing was writing a shiny version of a difficult time professionally—I was coming off a string of (sometimes really hurtful) manuscript rejections and was trying to write a column about how to deal with difficult news (first, do this… then, do this…). As I wrote and rewrote the column, I kept coming to the same conclusion: This doesn't sound like me, and it's not the truth. I emailed **Tara Behrend** quickly to say I couldn't turn in a column because it wasn't coming together and it didn't sound like me, and she was gracious and understanding and gave me a much needed pass on the deadline.

The truth is, I love my job. I still can't believe a lot of days that I get to go to work and solve academic puzzles and work with students and colleagues on research. But, the other truth is that this job requires a lot of mental toughness, and some days I don't have it, and the process we are in as academics wears me down. For instance, publishing is constant a battle, and although I think I've been able to figure some things out—I try to keep my general panic tied to the words "high risk" to a minimum as much as possible, though my coauthors probably actively disagree with that—publishing is always going to take a lot of psychological and emotional stamina. As I mentioned above, about 3 months ago, I received a rejection and it *hurt*. If you talk to my coauthors, they'd tell you that I was frustrated, upset, and slightly shaken up more than I'd like to admit. I say this not looking for sympathy but rather because I worry that we don't talk about *this* side of the story as much as we should. The journal publishing statistics are out there, and we know it's a small numbers game—this is something I tell my students to prepare them for the realities of publishing in our field. Yet, we often just see the CVs that are polished and clean and hide the battle scars, unless you look at [this professor's CV,](#) to which I bow down.

Around the time of the aforementioned rejection, a friend of mine received a rejection as well (from the same journal, to boot). We consoled each other via texts full of gifs and emojis to cheer each other up, and the next day we spoke on the phone because—rejections aside—we still had work on a paper that needed to get done. After rehashing our rejections and the reviewer comments that were so right or so wrong and everything else we could have maybe done differently, we both proclaimed: "Everything's FINE." We weren't being sarcastic—everything *is* fine even when it's not, because things come in waves with this type of job. There are periods where everything hits, and there are periods where everything crashes, but it all tends to balance out in the end. With everything going on in the world (and lately, there is *a lot*), I know that my stressors are peanuts in the bigger picture. So, this column isn't about how to overcome rejection, or how to handle reviewers, because there really isn't a one-size-fits-all solution for either of those issues other than saying "stay resilient" and "answer all the things." Instead, I'd like to take a few hundred words to highlight the people—in some very broad categories—that have helped me remember that everything's fine while "on the mill."

The person in your department who gets you/your work. I'm lucky to have worked in three departments counting my graduate program where I had folks up the hall or next door with whom I could be myself. I mean my absolute, authentic self—people who I could go into their office to vent, to celebrate, and to just express my frustration or anxiety with in a 100% judgment-free way. I realize that these people don't always exist in a department, or there may be politics within a department that may preclude these kind of conversations from happening. But, that is yet to be my experience, and I'm hoping that never changes. As I mentioned a few columns back, this is even my policy when it comes to my doctoral students working with me—we talk about all of the feelings and thoughts tied to publishing, because what are we doing if we are pretending that there aren't the ups and downs tied to this crazy research process?

The person in another academic department who knows the publishing process but not your work. I like the fact that I have several colleagues who have become close friends in other departments in the business school as well

as outside the business school who can simply commiserate about the publication process without getting into the nitty gritty details of our research. Sometimes, I don't *want* to talk about theoretical implications I'm trying to sell or the issues with the methods I'm applying or the complications I'm experiencing with a new type of analysis. That's OK, because these conversations tend to take a deeper dive into discussions of well-being. Lunches focus on questions of whether I'm still running/training for any races as a way to cope with stress or how to balance work–family demands (work–husband–pet demands as of present is what I can contribute to this conversation). Sometimes, the conversations shift towards comparing tenure expectations across the different departments and the type of identity we are trying to create in the field. It's nice to have people who are in the tenure process but not my *exact* tenure process. It's just pure emotional support, and sometimes that's all you need.

The coauthor at another school who will call you out when you need to calm down. I'm fortunate that a lot of my coauthors are the people I want to hang out with at a happy hour or dinner. In fact, I've literally traveled to spend time with colleagues at their universities to hang out and work for a few days (with a heavy emphasis on the hanging out part at times). Everyone needs the collaborators that they can call when a reviewer comment has you confused or perhaps feeling something a *tiny* bit stronger than confused. But, more importantly, I need collaborators who can sense when I'm a bit on edge and who feel comfortable enough telling me to get a grip or that the analyses are fine or the theorizing/construct labeling is working out as planned. Not only has finding collaborators like this made the research process more enjoyable all around, but they truly have helped me maintain my sanity when I've needed it the most.

The friend or family member that kind of has no idea what it is you actually do. Of course all of my friends and family outside of academia know what I do—they know I teach and that I write a lot and that I'm closing in on my tenure packet being submitted in the near future, and that's a big deal requiring lots of champagne. But, they don't all necessarily know the ins and outs of what I'm researching, and that's nice for two reasons. First, when we do talk about what I'm researching, we really get to talk about it—it's all new, and it's fun to explain some of my projects. (Based on these conversations, one friend of mine thinks I have a love affair with Qualtrics, and it's now a hilarious inside joke for both of us). But, the second reason it's nice is research and tenure-related stress does *not* enter the daily conversation within these relationships. For me, I really need that. I need to have people in my life where I know that when I pick up the phone, we are going to talk about our spouses, and our pets, and the latest thing that happened on *X* trashy TV show that we enjoy watching. (I know you're wondering, it's *The Bachelor* and *The Bachelorette*—and no, I'm not embarrassed by it.) Sometimes I need to be the person that isn't analyzing latent profiles or creating panels in Qualtrics for the next data collection; instead, I need to be the person sharing the story of my cat who ate a foot of ribbon and the heroics Mike and I went through to…um, get the ribbon back. True story.

Cats. Just to perpetuate my cat-lady status, especially in light of that ribbon story.

The spouse, partner, significant other, or bed-rock figure(s) in your life. I don't know if this makes Mike happy, sad, or indifferent, but he can now name the acronyms for most major I-O and management journals. He knows the names of my analysis software. He knows the latest reason why I'm pretty sure Reviewer 2 is out to get me. He knows how to help navigate my panic when I forget to pack my clothes for an interview and need to find a suit in a department store at 8PM the night before my job talk. (True story, again—this column is just highlighting that it is taking a literal village to keep me functioning.) He knows that this process is going to have a lot of ups and downs, even post-hopeful-tenure. In the 7 years we have been together, we've worked at three schools in three different states, lived in six houses, and the one thing that has remained constant is Mike's support, even when it's early in the morning and I haven't had my coffee yet after a late night of writing. I feel fortunate that my parents have also been very much "in the know" during the tenure process—they too know the difference between *AMJ* and *JAP*—and that I have a collection of people who have been cheering since I started my Ph.D. program and decided it was a path to academia I wanted to follow.

So, as I find myself feeling a bit too overwhelmed with gratitude, I just want to finish this column by saying a huge *thank you*. And to my friends on the mill who are also living through the ups and downs, you know where to find me if you ever need me. Everything's fine. Truly.

Max. Classroom Capacity: An Interview With Satoris S. Howes

Loren J. Naidoo, Baruch College and the Graduate Center, CUNY

Dear readers,

For this issue I am pleased to be joined by Satoris (Tori) S. Howes, 2016 winner of the SIOP Distinguished Teaching Contributions Award. Dr. Howes is an associate professor of business and business program lead at Oregon State University–Cascades. Dr. Howes earned her bachelor's degree in Psychology and Public Relations from the University of Central Missouri, her master's degree in I-O psychology from Missouri State University, and her PhD in I-O psychology from Texas A&M University. At the end of her graduate studies, she worked as a consultant in a Chicago branch of a global leadership solutions consulting firm. She then transitioned back into academia, working at the University of Wisconsin-River Falls and Kansas State University, where she was awarded the College of Arts and Sciences William L. Stamey Teaching Award in 2012, the Ralph E. Reitz Outstanding Teaching Award in 2015, and the Outstanding Contributions in Research Award in 2015. Dr. Howes is a regular contributor in the fields of management and I-O psychology in the areas of performance management and feedback, employment selection, occupational health and motivation. She has authored and, along with undergraduate and graduate students, coauthored articles in such journals as the *Journal of Applied Psychology, Organizational Behavior and Human Decision Processes, Human Relations,* and *Journal of Vocational Behavior*. In addition, Dr. Howes is the coauthor (with **Paul M. Muchinsky**) of the best-selling I-O psychology textbook, *Psychology Applied to Work*.

I'm delighted to welcome Tori to Max. Classroom Capacity!

Loren: Tori, thanks so much for agreeing to talk to me! OK first question, what made you decide to pursue a career in academia?

Tori: I have always enjoyed being in the classroom. I cotaught an honors course with a faculty member when I was in undergrad and really liked it. It wasn't until I was in my master's program at Missouri State, however, that I discovered I should pursue academia. I was in between my first and second year and was having a sort of existential crisis and didn't know what I wanted to do. I was falling victim to the imposter syndrome, certain I was in over my head and didn't belong. I was thinking of dropping out when my advisor, **Bob Jones**, convinced me to stick around see if teaching interested me. I soon learned that I was assigned to teach an introductory statistics course. On top of that, I was given an evening course (3 straight hours of stats!) with many nontraditional students who were older than my parents (gasp!). I was so nervous and intimidated that I had nightmares in the weeks prior to the class starting, and felt physically ill going into the class for the first time. Somehow I did it though. Not only that, but I loved it. More importantly, though, it was the students who sealed the deal for me. I remember laughing with them in class as we made our way through the material. I remember them teasing me about the food I ate during the break, about how I talked fast and laughed at my own jokes, and about how flushed I got (from being nervous) when class was starting. I also remember how they said I helped them feel more comfortable and willing to come to a class that they had dreaded signing up for. I remember how touched I was when they said that and knew at that point that this was the path I wanted to take.

L: Interesting! I had a similarly influential early experience teaching developmental psychology (of all topics!) in grad school at Akron U with an amazing group of students. What do you consider to be the most important aspects of your teaching philosophy?

T: There are a few things that I think are key in terms of my philosophy towards teaching. First and foremost, I learned early on that I have to be myself when teaching. I can't pretend to be somebody I'm not. When I do, my teaching really suffers. If I try to teach somebody else's lecture or use somebody else's notes, I fail. So I can never just use a publisher's slides and call it a day (nor would I want to). My classes tend to be conversational, with humor interspersed. My dad laughs at all of his own jokes, and laughs hard, and soon enough you'll start laughing too, even if you're not sure what's funny. If I got anything from him, it's that. I really enjoy an interactive, fun class. Those are the ones I remember the most from college, so I try to bring the "fun" element to my own classes. Beyond that, I focus a lot on trying to get students to apply the material. If they don't know how to actually *do* the

stuff we talk about, then what's the point? Finally, I try to focus on what the "take aways" are for any given class. There are so many classes that I took in college that I can't remember a single thing from (cough, Mass Media Law, cough). I don't want my classes to be those classes for students. I also think about how I've taught classes with pre-requisites that it seemed like students must have slept through as I'm trying to reteach key concepts. So I try to teach with those thoughts in mind. I repeat the essential things. I include the same concepts on multiple tests to ensure some things are drilled in. That student in your upper-level stats class who didn't know that correlation does not imply causation? Not from my class.

L: I think that's an important insight—being yourself is especially difficult to do when you're still figuring out who you are as a teacher. I agree about "fun," and I think that the role "fun" plays in learning is underemphasized to teachers. Why do you think students benefit from classes being fun? Do you think it's just a means of keeping students' attention, or is something deeper going on?

T: Good questions! I agree that "fun" is underemphasized by some teachers, or even considered taboo. I've had colleagues bemoan the idea of trying to make a class fun, saying "we're in the business of education, not edutain-ment" and that we shouldn't care about entertaining students when our focus is on conveying material. I've always disagreed with that idea. While I don't think it's my job to be an entertainer per se, I do strive to be engaging in the classroom. That's the thing, though. I think of "entertaining" and "engaging" as different things. It's not about do-ing tricks, telling jokes, or making every class a performance. It's about making a connection, getting students in-volved, and creating a positive and energizing atmosphere around learning that matters. I think that's the im-portance of a "fun" classroom. It's not just about keeping students' attention (though that helps). It's about making them feel valued and showing them that what you have to offer is exciting and worthwhile. Making a connection can be as simple as purposefully making eye contact and smiling, making efforts to view students as more than mere seat warmers, and providing personal and relatable examples. Finally, for me it's not just about trying to make the class fun for the students. It has to be fun for me too. I strive to make the class engaging and interactive because that's what *I* like. If I'm excited about a topic then the students are more likely to be excited. I constantly start classes off with, "I LOVE this topic. It's one of my favorites." I never tell students I don't like a topic I'm about to cover (though there are topics I can't wait to get through) because it sets the mood in a way I don't want. And what if that one topic is the one that ignites a student's interest in the field? Then that alone is exciting and reason for me to not dislike it. Ultimately, if you don't care about what you're teaching, and you aren't excited by it, and you don't show why it matters for them outside of a grade, why would you ever expect students to care or retain the material beyond the course?

L: This is a great point and I completely agree with you. It is very much the way I approach teaching as well. But what about those individuals whose natural tendency isn't to be "fun" in front of a classroom? What advice would you give, given you note the need to be yourself on the one hand and be engaging in the classroom on the other?

T: I would say that there are many ways to be engaging in a classroom and that the individual should try out differ-ent ones until they find ones that work for them. I don't think it's too much to ask that professors make eye con-tact and not read directly from their slides or notes when teaching. Having lecture notes read to you in a class is not engaging, even if you have the voice of Sean Connery or James Earl Jones (though if you could do different voices, I'm sure it would be entertaining for at least one lecture). I'd also comment that when I say "be yourself" I'm not saying that you can't go outside of your comfort zone and try new things. It also means that there may be things you naturally do (or don't do) that you shouldn't (or should). For example, a silly but memorable learning moment for me occurred in grad school. I remember giving a presentation in a class with one of my best friends, Jaime. Afterwards, the professor told us that we "rocked." Jaime and I looked at each other, high-fived and began congratulating ourselves. The professor interrupted us by saying, "No... you rocked... as in you swayed back and forth." This funny albeit humbling moment helped me considerably. It not only gave me a story I can tell students before presentations to lighten the mood, but to this day I try to make a mental note of my movements when I present to try to avoid being distracting in that regard.

L: What a great anecdote! I love it. So what's the next teaching challenge on your plate? Do you have any new courses, technologies, or techniques that you are considering?

T: The biggest challenges I'm facing are new preps at the moment. This last year I taught an undergraduate course on innovation and an MBA course on corporate social responsibility. This fall I'm slated to teach strategic management and venture management. These are very new classes for me, and stretching me a bit outside of my comfort zone. I'm excited about it, though, and reminded that one of the perks of academia is that we get to be lifelong learners ourselves.

L: I couldn't agree more! Tori, it's been a real pleasure—thanks for talking with me!

Readers, as always, your comments, questions, and feedback are welcome.

Spotlight on Award Winners: A Brief History of SIOP Fellowship

Garett Howardson, Tuple Work Science, Ltd/Hofstra University & The George Washington University; and Liberty Munson, Microsoft

In this installment of the *TIP* Awards Spotlight, we focus on the process of becoming a SIOP Fellow. In this first article, we interviewed the current chair of the SIOP Fellow committee Dr. Kenneth P. De Meuse to learn more about the process and his recommendations. In the subsequent articles, we will then interview a series of current SIOP Fellows about their personal experiences with the process. We begin below with a brief history of the SIOP Fellowship.

A Brief History of SIOP Fellowship

Although the title *SIOP Fellow* officially began in 1982 with SIOP's founding, the Fellowship's roots extend, at a minimum, 2 decades and 252 Fellows earlier. After the 1946 merger of the American Association of Applied Psychology (AAAP) and the American Psychological Association (APA) into today's APA, booming membership required organizational restructuring. As such, the APA Membership Committee was formed, charged with balancing the diversity of psychological disciplines represented within the newly formed APA. In support of this charge, the committee distinguished among APA members by creating 19 subdivisions within the Association, the 14th of which—then known as Industrial and Business Psychology—ultimately became today's SIOP (Koppes, 2017).

Recognizing even further those members making unusual or "outstanding contributions to psychology" (Koppes, 2017), the award of APA Fellow was established. Outstanding psychological contributions by Division 14 members were then recognized with the title of Fellow as a member of APA and, more specifically, Division 14. Between 1946 and SIOP's founding in 1982, 252 members' outstanding contributions to psychology were recognized and bestowed the title of APA Fellow as a member of Division 14, by then known as the Division of Industrial and Organizational Psychology (Koppes, 2017). These 252 APA Fellows were then bestowed the title of SIOP Fellow as SIOP became its own distinct entity, chartered with a total membership of 2,219. In other words, just over 10% of original SIOP members were recognized as Fellows.

From 1997 to 2007, roughly 15 SIOP members per year were bestowed the Fellow title, 12 of whom, on average, held full-time academic positions, and 3 to 4 of whom held non-full-time-academic positions, or approximately 80% academic Fellows and 20% non-academic Fellows. Within the past 10 years, the average number of Fellowships bestowed annually increased from 15 to 20 with the academic/nonacademic distribution becoming increasingly balanced. In between 2008 and 2016, specifically, the distribution between academic and nonacademic Fellows, on average, was 15 and 5, or 75% academic and 25% nonacademic. The 2016 cohort mirrored this distribution with a total of 27 Fellows distributed as 74% (20) academic and 26% (7) nonacademic. This most recent cohort of SIOP Fellows, however, saw a near even split of 21 Fellows with 52% (11) academic and 48% (10) non-academic Fellows.

It is with this history in mind that we turn to Kenneth P. De Meuse, the current SIOP Fellowship committee chair, for some more information about the Fellow nomination and selection process.

Who Selects the Fellows?

Perhaps unsurprisingly, those SIOP members previously earning the Fellow title select each year's new Fellows cohort. In keeping with the balanced distribution of academic and nonacademic Fellows, concerted efforts are made to balance this 10-Fellow committee's membership evenly with, approximately, half of its members academic and half nonacademic. In addition to professional diversity, concerted efforts are made to balance the committee's diversity on several other characteristics with, for instance, membership split approximately evenly between men and women. Further, recognizing the global nature of modern work, the SIOP Fellow committee reserves room for one non-U.S.-based current SIOP Fellow.

How Are Fellows Selected?

Given that only 5% to 8% of current SIOP members are Fellows, the selection standards are quite high requiring one's contribution to extend well beyond that of a "good" or "successful" career. Instead, one's contribution to I-O psychology must be "unusual and outstanding" (SIOP Bylaws, Article II Section 3). In other words, a good and successful career is a necessary but not sufficient condition for becoming a SIOP Fellow. Lest an unusual or outstanding contribution seem vague and nonspecific, the committee evaluates a candidate's contribution to the field across five quite specific areas: *research, practice, teaching/education, service,* and *administration*. Thus, the Fellowship evaluation criteria are identical for both academic and nonacademic candidates.

How Do I Learn More About the Process of Becoming a Fellow?

First and foremost, colleagues likely make the most valuable information sources, be they academic or nonacademic. One's first action should therefore be to ask current Fellows about their specific experiences with the process. It is not unlikely that an academic candidate's immediate colleagues are experienced with the Fellows process. Given the relatively recently balanced distribution between academic and nonacademic Fellows, however, current Fellows within the latter's immediate network may be relatively less frequent. Such Fellows, nevertheless, do indeed exist and examining the comprehensive list of Fellows found at http://www.siop.org/siop_fellows.aspx may help identify both academic and non-academic colleagues from whom to gather initial information. To supplement such information sources, we describe below specific portions of the Fellowship application process, the full details of which may also be found at http://www.siop.org/Fellows/.

The SIOP Fellowship Nomination Materials

The nomination packet in full requires supporting materials for six areas: *nominee self-statement*, *nominee curriculum vitae*, *nomination letter*, *endorser list*, and *endorser letters*. To better understand the overall Fellowship application process, we asked Ken De Meuse, the current Fellowship committee chair, for his perspectives on what constitutes a strong application. We begin by discussing what De Meuse noted as perhaps the most important role in this process, that of the nominator. Indeed, that the nominator manages the submission process on the nominee's behalf is quite important, particularly with respect to identifying those individuals who will endorse the nominee and write supporting letters as such, which is where we begin.

Choosing Effective Endorsement Letter Writers

Demonstrating an unusual and outstanding contribution to any of the five areas above less likely occurs in a vacuum. In other words, the Fellow process is one of collaboration involving coordinate efforts not only from the nominator and nominee but also, and especially so, from the nominator and endorsement letter writers. The most compelling and informative Fellowship applications, observes De Meuse, are those in which those letter writing endorsers are chosen who can speak intimately to the candidate's contributions and why, specifically, such contributions are unusual and outstanding. Preferable, in other words, is selecting endorsers based not on overall notoriety in the field but, rather, on the capacity to convey the candidate's unusual and outstanding contributions in an informative and compelling manner.

Recall from above that, in addition to the endorsement letters, the Fellow application contains five additional sources of information from which to convey the candidate's qualifications. Important is that each of the application's information sources complement the others while avoiding redundancies. An effective endorsement letter,

that is, would not simply reiterate the candidate's curriculum vitae (e.g., candidate has published 50 articles). Instead, such letter might, for instance, provide the necessary context for the remaining materials such that this information could have been gleaned only from a colleague intimately familiar with the candidate's qualifications. This is not to assume, however, that demonstrable candidate qualifications should be self-evident; rather, such qualifications are likely better communicated in application areas beyond the endorsement letters, which brings us to the role of the candidate's self-statement.

Writing an Effective Self-Statement

Guidelines for writing an effective self-statement may be summarized, tersely, as: Don't be shy! Promote yourself! The self-statement is a means to communicate those contributions the candidate believes are unusual and outstanding, thereby warranting Fellow membership. These self-identified qualifications, observes De Meuse, are most compelling when communicated unambiguously, often through specific metrics quantifying the candidate's impact beyond his or her immediate context extending to the field writ-large. A candidate creating and validating a novel psychometric instrument, for instance, might point to the number of languages into which the instrument has been translated or the number of organizations using said instrument beyond the candidate's own. Similarly, a candidate might note the number of SIOP committees on which the candidate has served, teaching and service awards won, book/journal publications, talks given internationally, or interviews featured in public-facing outlets, such as the *New York Times* or *BusinessWeek*. Compelling self-statements demonstrate an impact beyond the candidate to the field in general and do so in a measurable, unambiguous way.

But Wait. There's More! Don't Delay. Act Now!

In closing, Dr. De Meuse wishes to remind readers that although the precise dates on which nominations begin and end, late August typically sees the nomination process opening and continuing until early November. Submitting an application beyond the line in time that is this early November due date, however, effectively kills one's chances at Fellowship nomination (hence the term *dead*line). As such, candidates and nominators would, ideally, begin the process far in advance of the nomination-opening date. As Dr. De Meuse reminds us, in other words, the SIOP Fellowship is an unusual and outstanding recognition covering, at least, a decade of one's work and life; communicating achievements as such, not surprisingly, might take more than a few weeks.

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Garett Howardson is the Founder and principal work scientist at Tuple Work Science, Limited and adjunct psychology professor at both Hofstra University and at The George Washington University. Most of his work focuses on quantitative, psychometric, and/or computational issues to better understand the psychology of modern, technical work writ-large (e.g., aerospace technicians, computer programmers). Garett is also an avid computer geek. In fact, he has a degree in computer science, which he avidly applies to his research and work in pursuit of one deceivingly simple goal: better integrate I-O psychology and the data/computational sciences to understand work.

Liberty Munson is currently the principal psychometrician and Assessment and Exam Quality lead at Microsoft. She is responsible for ensuring the validity and reliability of Microsoft's certification and degree programs. Her passion is for finding innovative solutions to business challenges that balance the science of assessment design and development with the realities of budget, time, and schedule constraints. Liberty loves to bake, hike, backpack, and camp—basically, if the sun is shining you'll find her enjoying the great outdoors; if not, she's in her kitchen tweaking some recipe just to see what happens. She has also been actively involved in editing Microsoft's Cookbook to raise money for a local charity, FareStart, as part of Microsoft's Give Campaign. And, she just got a new mini schnauzer puppy, Apex!

History Corner

Nathan T. Carter, University of Georgia
Michael A. Daniels, University of British Columbia

Reflections on SIOP 2017 Living History Series With Sheldon Zedeck

The 2017 Meeting of SIOP was the first for the new History Committee. We had the privilege of continuing the tradition of conducting the Living History Series interviews with past SIOP president and past editor of the *Journal of Applied Psychology*, **Dr. Sheldon Zedeck**. The full hour-long interview is available here. In this brief installment of the History Corner, we reflect on the experience.

Interviewing Shelly was an exciting process, as both of us are alumni of Bowling Green State University. Because of this, we had heard much about Shelly—the first graduate of that PhD program (as he humorously confirms in his interview)—over the course of our graduate careers. It was not only a pleasure to learn about his unique career path and his insights but also to realize that Shelly is a great person with a warm and charming disposition. We would like to thank him sincerely for imparting his time and experience to make this possible. A rundown of what to expect in the video:

- What Shelly wanted to be when he grew up and how he stumbled into I-O psychology
- As an undergraduate, what course Shelly got "less than a C" in
- Who was *really* the first graduate of BGSU? Shelly or Frank Landy?
- How Shelly got tenure without an I-O program at UC Berkley
- How Shelly dealt with tragedy in his personal life at a crucial point in his career
- … AND MUCH MORE!

For the SIOP 2018 Living History Series we will be interviewing **Dr. Nancy Tippins** (PhD, Georgia Tech), a principal consultant at CEB (now Gartner) with more than 30 years of experience on the applied side of industrial-organizational psychology, working for organizations like Exxon, Bell Atlantic, GTE, and Valtera, mainly in the areas of assessment and selection (though as we will learn, she has done much more). Her influence can be seen in the many books she has either coedited or coauthored, her extensive publication record in peer-reviewed journals, and her involvement in committees for establishing testing and assessment practices for SIOP's *Principles* (1999) and the *Standards for Educational and Psychological Tests* (2014). She is a past president of SIOP (2000–2001) and is a fellow of SIOP, APA, and APS. In keeping with our tradition, Dr. Tippins is an exemplar of the scientist–practitioner model, and we are very excited for her interview in Chicago. Hope to see you there!

Spotlight on Humanitarian Work Psychology:
**Introducing I-O to Nonprofits**
Morrie Mullins (Xavier University) and Shujaat Ahmed (Illinois Institute of Technology)

One of our favorite sessions from the 2017 SIOP conference was a panel discussion about prosocial I-O. Despite being toward the end of the program, the session was well-attended, and the audience members were very engaged as the panelists discussed the work they'd done with various organizations. However, there are very few sessions that get scheduled in a room big enough to hold all of SIOP's members, and the experiences the panelists described in working with nonprofits were interesting enough that we wanted to build on their discussion in this issue's *TIP* offering.

As such, we're pleased to introduce **Holly Payne** (Gartner), **Don Scott** (Development Dimensions International/DDI), and **Doug Wolf** (Select International). They bring a wealth of experience in terms of volunteering with nonprofits and using I-O in prosocial endeavors, and we thought you would find both their experience and their thoughts about prosocial I-O, and how to communicate what I-O is to organizations you may end up volunteering with, useful. We certainly did!

Thank you all for agreeing to do this! To start things off, how did you get involved with nonprofit work?
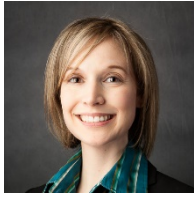
Holly: I've always enjoyed volunteering. Throughout my life I have volunteered with community, civic, and religious organizations. For example, during the 2010 recession, I was invited to provide behavioral interview coaching to job seekers within Atlanta. It was a very natural way to leverage my skills, and it provided tremendous benefit to my local community. While we may be rather immersed in topics such as behavioral interviewing, we might forget that many people have had little exposure to it, and the opportunity to learn and practice interviewing skills can have a huge impact on an individual's ability to secure employment. Seeing that in action changed the way I think about I-O at work and beyond.

That experience along with several other very rewarding undertakings propelled me to submit a session to the 2017 SIOP conference on the topic of using I-O skills to help nonprofit organizations and the individuals they serve. I fervently believe that we each can make a positive contribution in this way, and it was exciting to see the very good works of the panelists and the interest of the audience. Many people want to get involved but just don't yet know how. Recently, I found an opportunity with VPA ([Volunteer Program Assessment](#)). Through the program, I've met a number of wonderful people and had the opportunity to provide pro bono consulting for animal shelters. For instance, in my work with the Humane Society, a survey was launched to gather input from their volunteer workforce, arguably the lifeblood of this nonprofit. Based on the data, I identified the organization's particular areas of strength and areas for improvement within the context of a large set of benchmarking data provided by the VPA survey. My discussion with the Humane Society leadership team focused on how to leverage the survey results to create initiatives that drive volunteer engagement and commitment and align with their overall organizational strategy.
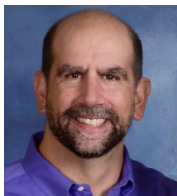
Don: My involvement has been through two organizations that to which I have long been associated. The first is Ingomar United Methodist Church, where my wife and I have been members for over 15 years and my children are active members as well. The second is Pittsburgh YMCA Deer Valley Family Camp, where I have camped nearly my entire life with my extended family and was a staff member while an undergraduate. In both cases, familiarity with the organizations leadership and abundance of opportunities to improve the organizations through talent management lead to me being invited to help. DDI's capabilities across the I-O spectrum and strong support for volunteerism greatly enable and aid my volunteer efforts.

Doug: Select International's foray into the type of nonprofit work that utilizes our I-O knowledge came through an employee. An acquaintance of the employee taught at high school attended by at-risk students. This was the place where public schools sent (i.e., separated) the disruptive students. Frustrated by the students' lack of employment prospects upon graduation, Select's employee examined if there was anything Select could do. We offered our expertise in employee selection to coach the students how to prepare for job interviews.

This was an interesting departure for Select International. We worked on the employer side, helping companies discern which candidates to screen in and screen out. Working with this high school, we were flipping that model. It took a little effort, but we developed a model that worked.

We went into the classroom and taught the students how to prepare for a corporate interview. We coached them what to say and what not to say. Without delving into any judgments about socioeconomic challenges and the like, we found the students' perceptions on such basic things as arriving on time and not eating or drinking during the interview to be as shocking as it was amusing. In addition to interview preparation, we covered resumé-writing skills, how to dress, and so on. Then, over the course of a few weeks, we'd conduct mock interviews. The students were interviewed by Select International consultants. In addition to the valuable practice it provided, the students were given feedback on their performance and tips to improve.

We've since applied this same model to other organizations beyond this initial high school that also cater to disadvantaged youth and to schools serving students with disabilities.

Most uniquely, we recently used our test development expertise to partner with a nonprofit benefiting children on the autism spectrum. We created game-like assessments to reveal autistic children's potential. The assessment games are designed to measure Gardner's different type of intelligences. Using information from O*NET, the results are mapped to potential career choices for which the child may be suited.

All in all, it's been a rewarding experience for the receivers as well as the givers.

Given that you've all come at this kind of work from unique perspectives, how would you recommend approaching nonprofits about partnering?

Don: First off, I recommend getting involved in organizations that matter to you and have a mission statement that you passionately believe in. Many organizations are not likely posting "I-O Help Wanted" signs, but they are typically looking for all kinds of volunteers. Some of those volunteer positions might be related to I-O, but I believe that volunteering in any capacity is a great way to start. Such "non-I-O" volunteering gives you the opportunity to better understand the inner workings of the organization, connect with the organization's leadership, and identify where it might benefit from I-O consulting and services. It has been my experience that prosocial organizations are rife with opportunities for improved talent management practices. As those I-O related opportunities come into focus, make a pitch to provide services and explain the improved outcomes that will result. Don't be surprised that you will likely have to put significant effort into selling your services (e.g., PowerPoint presentation). Once you have provided such a service, and created positive outcomes, chances are very high you will be asked to do more and might someday find that you are in greater demand than you ever expected. This is one of the reasons I strongly recommend that you are highly motivated by and strongly aligned with the organization's mission.

Doug: When you hear a need, there are two very important things to keep in mind and make clear. First, explore the need and propose how you might be able to help. Second, explain the limits of what you can offer or achieve.

Nonprofits are underfunded and understaffed and typically eager to receive help. They are eager for you to solve a problem they may have. Understandably, there is a temptation to think that you will solve the entire problem when we really you are only able to solve just a piece of it. Therefore, expectation-setting is critical to a successful relationship.

As an example, in the case of coaching students to interview better, we were clear that we were only helping the students prepare for a job interview. We were not helping them find a job.

Holly: In my experience, a partnership works best when there is a specific organizational challenge that we, as I-Os, can help address. Opportunities are everywhere. Often people in your network, personal or professional, will be aware of nonprofits that have needs. Consider starting a conversation with a contact at a nonprofit by simply trying to get to know the organization. Especially in nonprofit organizations, it seems people are likely to mention some pain points. If one of these is something I-O can help with, there is an opening to mention an approach or a process that you are knowledgeable of. It is helpful to be able to say you've previously implemented a similar solution or otherwise build credibility, just as you would with your paying clients. Sometimes this is a natural place to mention your background in I-O. Other times it might be best to keep the focus on explaining the benefits the nonprofit could expect when implementing the proposed solution. Think about different areas of I-O work (e.g., workforce surveys, selection, development). These areas are all at play in nonprofits and each is a place where I-Os can potentially lend their experience to help.

When it comes to I-O in particular, how do you explain who and what we are, and communicate our value added?

Don: For my recommended approach above, it is less about selling what I-O is but selling the organization on a specific positive outcome (or solving a specific talent management issue). Part of that sales job is bringing the organization to understand what benefits to expect and the evidence you have that the approach you want to take

will lead to those outcomes. After citing such evidence might be an ideal time to explain evidence-based talent management practices and the field of industrial-organizational psychology.

Holly: I usually mention the value of a specific solution and reference previous work I've done where a similar solution was effective. When it comes to talking about I-O, again, I usually discuss it in terms of the solution I've suggested. For instance, if I've suggested an employee survey, I might say that in I-O we frequently survey employees at all levels to understand their jobs or how they work with each other. I might explain that I-O is the application of psychology to workplace issues, so we are well positioned to conduct surveys that help leaders understand their employees' attitudes and motivations. I don't use I-O to persuade a nonprofit but rather mention it near the end of the conversation as a final point of building credibility and confidence in the proposed work.

Doug: Interesting question. We don't find that we must explain the additional value we provide. For what we are doing, the value our expertise provides is clear. Perhaps for others doing other types of I-O consultative work, the situation is different.

Thank you for that, I'm sure our readers will find those ideas very helpful. Changing gears a little, what do you see as the major benefits that come from working with nonprofits?

Doug: The obvious and accurate reply is that we make a small, positive impact on someone's life who needs it. At the initial intervention, you get the immediate smiles and see the appreciation when someone learns something they didn't know that will benefit them later. Occasionally, you hear from someone that what you shared helped them land a job they interviewed for. When that happens, it's truly special. It's like someone touched your heart with a magic wand.

The other benefit Select International derives from our work with nonprofits is employee satisfaction and engagement. At Select, we have a committee called Select Cares. Giving back is woven into the fabric of our company culture. The team of employees comprising the Select Cares committee direct all our pro-bono and charitable work. The company apportions them a budget. Whether it be on purchasing school supplies or matching funds donated on a charity walk/run, this team decides how we spend it. They also coordinate our consulting efforts, for delivering the work we do with nonprofits. The Select Cares committee is one of the most popular committees at Select International.

Holly: It can be very satisfying to know you are helping an important cause. Typically nonprofits rely heavily on volunteers to help them reach their mission. Therefore, they tend to appreciate the time and effort given in a way that might be different from our I-O clients. There can also be opportunities to try things you would not attempt with paying clients. This can provide the opportunity to round out skill sets or reveal interests you did not know you had.

Don: For me, there are two. Primarily, I receive great satisfaction from helping the organizations I work achieve their missions, which results in improved lives for both my local community and for underprivileged people throughout the world. Secondly, I have been able to "practice" in several areas of I-O psychology, such as organizational development, leadership training, and performance management, that I otherwise would not have had the opportunity in my daytime job that focuses on assessment and selection.

What have you found to be some of the key challenges related to working with nonprofits?

Holly: One of the primary differences is often timing. There may not be the same urgency to complete projects. Additionally, depending on the type of work you're doing, you may find that you're completing more aspects of the project than you might typically. For instance, if you work as part of a team in your I-O job, when volunteering at a nonprofit, you may complete some of the work that your team members typically would. Such a situation calls for flexibility and learning agility.

Don: As previously mentioned, selling is one hurdle. After getting established, the amount of talent management issues and opportunities can be plentiful, perhaps overwhelming, and providing solutions that have a lasting impact can be very time consuming and require ongoing support. When working with other volunteers, some will

miss deadlines; provide a positive role model and meet the commitments you make. If you want to have an impact, be prepared to put a lot into it.

Doug: I mentioned expectation-setting previously. I will mention it again. The experience is much more rewarding and successful if both parties understand what your efforts will achieve and the limits to what you will not achieve or are simply not able to do.

You must be prepared to deal with the nonprofits' disorganization and seeming lack of involvement. This goes hand-in-hand with expectation setting. You need to acknowledge and accept that nonprofits are not run like typical businesses. Sticking to timelines and schedules and being responsive may be important to you, because that's what your corporate clients may expect; but don't expect it to have the same importance for nonprofits. You may, rightly, wonder how the organization gets anything done; but bite your tongue, holster your constructive criticism, and roll with whatever comes your way. In sum, be prepared to be adaptable and be prepared to maybe do more than what you were expecting.

Some other challenges we faced are some of the recipients (i.e., students) aren't interested in receiving what you are giving. We cannot change that in the short time we are interacting with them, so our advice is to concentrate on the ones who are interested in benefiting. Also, when providing consultation to students with disabilities, be aware that privacy rules prevent the organization from revealing what the students' disabilities are. Again, you need to be prepared to be adaptable and do the best you can.

In conclusion, then…

In talking with three panelists experienced in prosocial work, we have learned a number of things. The opportunities for nonprofit work are endless, and you can utilize your I-O knowledge to make a difference in your local communities, whether it is improving an organization's talent management practices, developing game-based assessments, providing interview coaching, or something else entirely! The key thing to remember is that when you approach nonprofits about partnering, get involved with events, programs, or organizations that you are passionate about, and take some time to propose how exactly you could help them. Assisting nonprofits can have a positive influence on everyone involved: It can make them appreciative of our efforts, and it can most likely bring more business opportunities our way. There are also key challenges when working with nonprofits. Timing can be an issue in completing projects; selling your services can be a hurdle in and of itself. It is important to set expectations and indicate what you can do and what you can't do.

We would like to thank our panelists for sharing their wisdom and experiences in this important I-O domain. We hope readers find inspiration from this column, and are moved to working with non-profits. Please contact us if you have any questions or comments regarding this column or HWP, we'd love to hear from you! Feel free to reach out to us directly (sahmed22@iit.edu or mullins@xavier.edu) or through the GOHWP web page.

I-O Outside I-O:
A Quarterly Review of Relevant Research From Other Disciplines

Mark Alan Smith
CEB Talent Assessment

Alex Alonso
Society for Human Resource Management

Over the last few years, increased awareness and concern over aggression and bullying in school children have spurred efforts to develop effective prevention programs for these behaviors. Although these behaviors in children have been going on for many years, objective research on the incidence and prevention of it is relatively recent. Part of the difficulty with research on the subject is that childhood aggression and bullying is common only in a broad sense, but it is not something that everyone experiences—either as the aggressor or the victim (thank goodness!). Even though this topic of bullying focuses on children, there are important learnings for I-O psychology in both the methods of research and in the findings. After all, we were all once children, and though we age, it is debatable how much the behavior patterns of many adults actually mature and improve.

Branson, C., & Cornell, D. (2009). A comparison of self and peer reports in the assessment of middle school bullying. *Journal of Applied School Psychology, 25*, **5-27. doi:10.1080/15377900802484133**

In this article, the researchers looked at the effectiveness of antibullying programs in schools. Typically, this type of research has used student self-reports of bullying, as opposed to other reports or multiple methods, to measure bullying and victimization. Obviously, self-reports are more straightforward and cost effective for researchers, although the question of accuracy has remained to be seen.

Method

Participants were students at a suburban middle school (grades 6 to 8) in central Virginia; a total of 355 students participated in the study. They completed the School Climate Bullying Survey, a 43-item self-report measure that included questions about bullying involvement, attitudes toward bullying, and school climate.

As part of the survey, students were provided with a standard definition of bullying, and then they reported the number of times they have bullied others or been victimized as the target of bullies in the past month. The final section of the survey also solicited peer nominations for victims of bullying, as well as bullies. Other variables measured via survey were: school climate, attitudes toward aggression, teacher tolerance, depression, and disciplinary school records.

Findings

Self-reported bullying correlated rather weakly (r = .18; *p* < .01) with peer nominations, whereas self-reported victimization correlated somewhat more strongly with peer nominations for victimization (r = .32; *p* < .01). Results showed that more than twice as many students were categorized as bullies using peer nomination (11%) as compared to self-report (5%).
Despite the limited agreement between sources of bullying information, both self- and peer-reported bullying/victimization were associated with depression and weakly associated with low GPA. In addition, regression analyses showed that both measures provided unique predictive value for depression and low GPA. These results raise concern about the reliance on self or peer reports alone to assess the prevalence of middle school bullying and suggest that both methods have merit.

Thoughts From an I-O Perspective
In our opinion, there are a couple of main takeaways from this research for our field. The first is that many of the measurement issues that plague the study of important issues in I-O also exist in other field in the social sciences.

Low base rate events are hard to predict and hard to study. Although it is good that the majority of students report no involvement in bullying, it makes the research difficult to conduct. Also, different ways of measuring of the same topic lead to different results and conclusions. Although this study seemed to indicate that both self-reports and other reports have some merit and validity, this does continue to remind researchers that simple and easy data collection efforts are not always the best way of conducting research.

Ladd, G. W., Ettekal, I., & Kockenderfer-Ladd, B. (2017). Peer victimization trajectories from kindergarten through high school: Differential pathways for children's school engagement and achievement? *Journal of Educational Psychology, 109,* **826-841. doi:http://dx.doi.org/10.1037/edu0000177**

In this recent article, the researchers sought to map frequency and patterns in school-based peer victimization throughout children in Grades K–12. They also looked to determine whether specific patterns of peer victimization were associated with children's academic performance.

Method

This longitudinal research following 383 students from kindergarten to 12th grade. They examined the relationship between peer victimization prevalence and key student performance outcomes like achievement, math performance, and reading performance. They also examined the relationship between peer victimization and social learning-related attitudes including perceived self-competence and academic competence perceived by parents and educators.

Findings

Results indicate a pronounced correlation between peer victimization prevalence and reduced performance in both math and reading. Perhaps more interestingly, the researchers also found that the impact of peer victimization prevalence increases over time with perceived academic competence decreasing the longer high-severity victims of peer bullying are exposed to unchanged conditions.

Thoughts From an I-O Perspective

In our opinion, there are a couple of main takeaways from this research for our field. Although the findings of Ladd et al.'s work seem fairly intuitive, they also provide insight into two phenomena we encounter in the organizational setting: workplace bullying and micro-aggression. As a profession, we have exhausted countless resources investigating the cost of failed leadership. When we consider the pronounced impact of prolonged peer victimization on student perceived competence and performance, we see there are potential applications for the work world. For example, consider for a moment what leaders are to do when resolving workplace bullying or employee relations issues. If we look at the lessons learned from Ladd et al., we can glean that there is an impact of peer victimization on school engagement as well. In each case, the research suggests that prolonged exposure leads to diminished skill building and performance. That is in the formative stages of life; imagine the multiplicative impact if one has experienced this in schooling and then encounters more in the workplace as an adult. The lessons applicable to our field are valuable and also provide an insight into the nature of developmental issues as they relate to entry into the workforce.

Organizational Neuroscience: An Overview of Ways Entrepreneurship Is Capitalizing on Neuroscience: Inspiration for I-O Psychology

M.K. Ward
University of Western Australia

Although many of us in the academic realm have been embroiled in debate regarding the way forward for organizational neuroscience (ON), entrepreneurship is one area that has made moves with ON without looking back. Entrepreneurship scholars are eager to use neuroscience in their research, and entrepreneurs are building products and services being introduced to the markets go beyond adding to the number of options offered to consumers. These innovations are moving from areas like marketing and medicine, and entering spaces in which I-O psychology has expertise (e.g. selection and performance). Being aware of these changes and active involvement at the intersection of I-O psychology is a nontrivial step for I-O psychologists to continue to be relevant and important in future work. This issue discusses ways in which entrepreneurs are using ON in their businesses, from startups to large, established organizations.

What's Happening in Business

The short answer is, a lot. Angellist shows 186 companies with an average valuation of $3.6 million classified as "neuroscience startups." Entrepreneurs around the world from Waterloo to Tucson, to San Francisco, to Singapore are leveraging neuroscience to capitalize on market opportunities. What types of products and services are these startups providing? It varies from context specific brain profiles, to neurosurgical tools, to brain training, to consumer brain imaging, to music discovery. Of course, the products and services being developed and sold involve some sort of technology component. Next, we describe some particularly relevant examples to be aware of.

Neuromarketing

Consumer research and marketing research companies have been around for years and have leveraged things like biometric tools, eye tracking, functional magnetic resonance imaging (fMRI), electroencephalography (EEG) technologies (for more information about EEG, read our interview with Stephanie Korszen here). For some of these companies (e.g., Affectiva, Buyology, Forebrain, MindMetic), a key focus is on using neuroimaging and other neuroscience-related technologies to improve understanding of consumerism, emotions, and engagement. Neuromarketing companies involve entrepreneurs who are bridging science and business in order to fill a market need and paved the way for different sorts of businesses.

Selection and Placement

Moving to a more traditional I-O psychology topic (selection and placement), entrepreneurs are leveraging technology and neuroscience in this domain as well. Particularly powerful is the combination of machine learning with neuroscience-based applicant assessments or games that are designed using cognitive neuroscience. This assessment data are then used in conjunction with machine learning algorithms to estimate a person's ability to do a job on offer. Cognition, behavior, personality, emotional intelligence, culture fit, and skills deemed essential to the job are assessed in some of the software platforms. Cognisess, for example, promises help for companies looking to improve their recruitment, claiming they are able to assess applicants *without* bias or subjectivity. This is a claim that can be verified by I-O psychologists. Another company that similarly focuses on predicting performance, Scoutible uses games developed based on neuroscience that take 20-minutes wherein machine learning algorithms collects data points from high performing individuals as they play the game. Then from the company's current team's play on the game, they build a Performance Predictor based on traits it identified in the top performers. When potential job candidates play the game, it uses those data points to predict performance and organizational culture fit. This is a prescreening method use to short list high-potential applicants and notify managers who can proceed with next steps in the selection process.

Performance

After selecting the right people for the right positions in your organization there's still a chronic concern to maximize performance, or at least perform adequately. Here we discuss an intrapreneurship example. Folks at IBM have devised a way to use cognitive computing, which in essence works the way our brains function, in order to create computing that learns and adapts to the world in much the same ways we do as human beings. It makes inferences, revises those inferences, and becomes smarter and better at performing a variety of tasks, including flying an airplane. Which leads me to the example: Airline carriers are using IBM Watson to develop a system to detect turbulence in a way that provides alerts to pilots who can proactively avoid turbulence that costs airlines $100 million per year in costs resulting from maintenance needs and delays.

AI and cognitive computing is not a new idea or term to many of us; however, it's worth discussing in the context of organizational neuroscience and entrepreneurship. AI and cognitive computing, particularly Watson, are leading to things like chatbots that act as lawyers who make cases, model "flow" for productivity, and/or assist in establishing business partners as well as match making. It only takes a small logical leap to imagine a chatbot that plays the role of I-O psychologist. This means it's important to understand the products and services that the business provides in order to understand the people doing the work and consult for such organizations. As long as the work is affected by these innovations, I-O psychologists need to keep up and then set the tone because we are the experts in data-based conclusions about work after all.

Hardware Products

Using neuroscience technologies to satisfy consumer needs, there are some hardware products that are already gaining traction. Stress management and relief is one need that's currently being targeted by hardware products. Thync, MeloMind, and Muse are three companies that use different neuroscience technologies.

Thync uses transcranial magnetic stimulation (TMS) in order to help consumers relax and to improve consumers' quality of sleep. The product combines electrode placement and transdermal electrical neuromodulation waveforms to influence cranial and spinal nerve pathways. The idea being that those nerve pathways synapse with key brainstem nuclei involved in modulating stress levels, mood, and sleep cycles.

Rather than TMS, MeloMind uses EEG sensors in hardware that connects with headphones through which they provide a neurofeedback loop. Their research and development involved creating signal processing algorithms for neural activity during cognitive processes involved in memory, emotions, and a resting state. The neurofeedback processes paired with EEG is what makes this hardware different from the other examples mentioned. Neurofeedback has already been discussed in leadership development in I-O psychology and organizational behavior.

Muse has developed a researcher-friendly EEG headband with dry sensors that is worn such that the sensors interface with the forehead. EEG dry sensors, battery-powered Bluetooth, and digital signal processing to assess and use brainwave data in lab or work settings. In the market, Muse aims to support and guide meditation using the real-time brain state. It measures states of focus, relaxation, and mind-wandering. What's particularly interesting is that there are audio and research tools also are available on Windows. Consequently, unique to Muse in this review of commercialized neuroscience is that there is a link back to research by providing software, a forum, and data resources that make it relatively easy to use Muse in research studies.

Conclusions

Expect a lot more products and software development that leverage ON. Many of these startups will be exciting, transformative innovations with powerful products and services. Wherever technology, neuroscience, and work is leveraged to fill a market need—whether we're aware of it or not—we will see implications that have breadth (global dispersion, social inequality) and depth (individual and personal change). Therefore, it is essential that entrepreneurs be extremely well-versed in neuro-ethics. A large number of startups that leverage neuroscience and technology does not necessarily mean that these products will be properly regulated whatever that even means. So, let's start thinking now and having policy discussions for what we want the future of work to look like at the intersection of neuroscience, entrepreneurship, and I-O psychology.

Calling Potential Contributors to "The Bridge: Connecting Science and Practice"!

As outlined in [Poteet, Zugec, and Wallace (2016)](#), the *TIP* Editorial Board and Professional Practice Committee continue to invite potential contributors to contact us directly. If you are interested in submitting to "The Bridge: Connecting Science and Practice" column, please contact either Lynda (lynda.zugec@theworkforceconsultants.com) or Craig at (craig.wallace@du.edu).

"The Bridge: Connecting Science and Practice" column features a variety of different types of articles. Possible types of contributions include:

- A question and answer written dialogue between an academic and a practitioner highlighting, for example, what is happening in academia that could be put into practice and what is happening in practice that could be further investigated with more research
- A case study highlighting the effective practice of science. For example, a recent practice-based issue provided by a practitioner, highlighting evidence-based solutions that were utilized, the impact or implications of those solutions, and potential recommendations or requests for more research
- A review of a key topic/area of interest to I-O psychology (e.g., employee engagement), presented from both the practitioner and academic perspectives, highlighting areas where science and practice converge and diverge and pointing to possible areas for further research or practice
- A description of a difficult challenge faced by a practitioner with a request for assistance, followed by a summary of scientific, evidence-based solutions that could be used for the challenge, provided by an academic or researcher
- A summary of the latest, cutting edge research findings, followed by a description of how those findings can be implemented in practice generated by both academics and practitioners
- A list of emerging trends, issues, and challenges being experienced by practitioners (e.g., top five requests of clients), accompanied with specific research questions or agendas that could be pursued to address such trends and issues

You can access previous versions of "The Bridge: Connecting Science and Practice" within previous editions of *TIP* or through SIOP.org here: http://my.siop.org/Resources/PPC/BridgeArticles
If you need anything additional, please let us know!

Mark, Craig, and Lynda

Feature Articles

Think Globally - Act Locally:
Survey Results Show Global Interest in Local Groups

Anna Erickson
CEB, Now Gartner

Virginia Whelan
Whelan & Associates

Corinne Williams
Organisation Solutions

Why do you belong to SIOP? For many of us, it's the community and opportunity to connect that attracts us to and keeps us in the organization. In fact, the 2008 Practitioner's Needs Survey cited "professional networking and sharing best practices" as one of the most highly rated benefits of belonging to SIOP (Silzer, Cober, Erickson, & Robinson, 2008).

Although large professional organizations like SIOP help us forge connections at a national level, many members have reported the desire to build a community at a more local level. Although SIOP does not have a structure that includes local chapters, dozens of grassroots local I-O groups have been created to help professionals network at a local level. To support these efforts, SIOP created the Local Group Relations Committee in 2013. This ad hoc committee, currently led by **Pete Rutigliano**, was formed to help strengthen the connection between SIOP and local I-O groups, and to provide information and support for forming, growing, and maintaining local I-O groups.

More recently the Alliance for Organizational Psychology (AOP) has initiated similar efforts to support local communities around the world. AOP was launched in 2009 to increase the visibility of I-O Psychology and to identify ways to mutually benefit its four member societies: SIOP, the European Association of Work and Organizational Psychology (EAWOP), the Organizational Psychology Division of the International Association of Applied Psychology (IAAP-Div 1), and the Canadian Society of Industrial and Organizational Psychology (CSIOP). One of AOP's aims is to support the creation and development of local communities of work and organizational psychologists around the world.

So what is a local community? These local communities or ***local work and organizational psychology (WOP) groups,*** as they are commonly referred to internationally, are formal or informal groups of individuals who meet periodically to discuss the direct or indirect application of psychology to workplaces or organizations. As these WOP groups often form based on very local needs, this umbrella covers a wide variety of different types of organizations.

In order to better understand the nature of the various WOP groups across the world, we conducted a survey in preparation for the EAWOP conference (more on that later). It was sent out to 1,067 non-US based SIOP members, 1,500 EAWOP members, 700 IAAP members, and 222 members of CSIOP. In addition, members of the British Psychological Society's Division of Occupational Psychology (BPS-DOP) were invited to respond to the survey via social media. A total of 284 responses were returned. Of these, 284 were valid, which we estimated to be a 9%-20% response rate.[1] Although results may not be completely

generalizable, the results of the survey do provide our first insights into the landscape of local groups around the world, and add to what we know about local I-O groups in the United States.

Respondent's Membership by AOP Society

The sample of 284 participants represents members across AOP member organizations.

Respondent AOP Society Membership	Count	Total	Response Rate*
SIOP	134	1067	~12.5%
EAWOP	109	1500	~7.2%
IAAP-Div 1	52	700	~7.4%
CSIOP	21	222	~9.5%
BPS - DOP**	14	***	***
Total	**284***	**3,489**	**9.5% - 20%**

Local WOP Groups Around the World

The sample, representing 48 countries, provide a snapshot of what local groups look like around the world. Results of the survey indicate that 40% of survey respondents currently belong to a local group. Of those who *do not* belong to a local group, 82% say they would like to join one. Of the 40% of respondents who *do* belong to a local group:

- 31% regularly attend meetings
- 31% serve on a committee or hold an officer position
- 49% work in academia
- 44% are practitioners
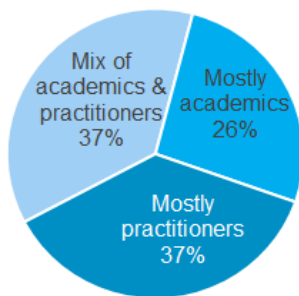
Percentages displayed represent the percent of those responded to the question "What is the composition of your WOP group?" n=75

***Membership Requirements and Demographics***

Membership requirements vary from group to group. Although many groups have educational requirements for members (16% of local group members said a doctorate is required and 28% said a master's degree is required), a quarter of respondents who belong to a local group said their local group has no educational requirements. Most common noneducational requirements for local group membership include relevant professional work in field (32%), interest or shared values of applied research to the workplace (26%), membership in a national psychological association (20%), and academic work in the field of work and organizational psychology (18%).

Groups varied with regard to their focus and membership characteristics, with some groups catering mainly to academics, others mainly to practitioners, and others with a mix of members.
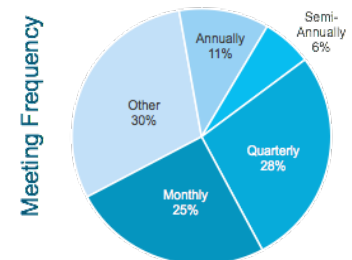
Why Do Local Groups Get Together?

Consistent with a similar survey of SIOP members conducted with in 2015 (Farmer, Shapiro, Sylvan, Zugec, & Whelan, 2015), most international respondents who belong to a local group reported they join to network and develop professionally. Discussing specific topics of interest, such as coaching, testing, or leadership, were also given as reasons for joining a local WOP group. Values shown are percent of those responding; multiple responses were allowed. Note that the two surveys did not allow for a full "apple-to-apple" comparison.
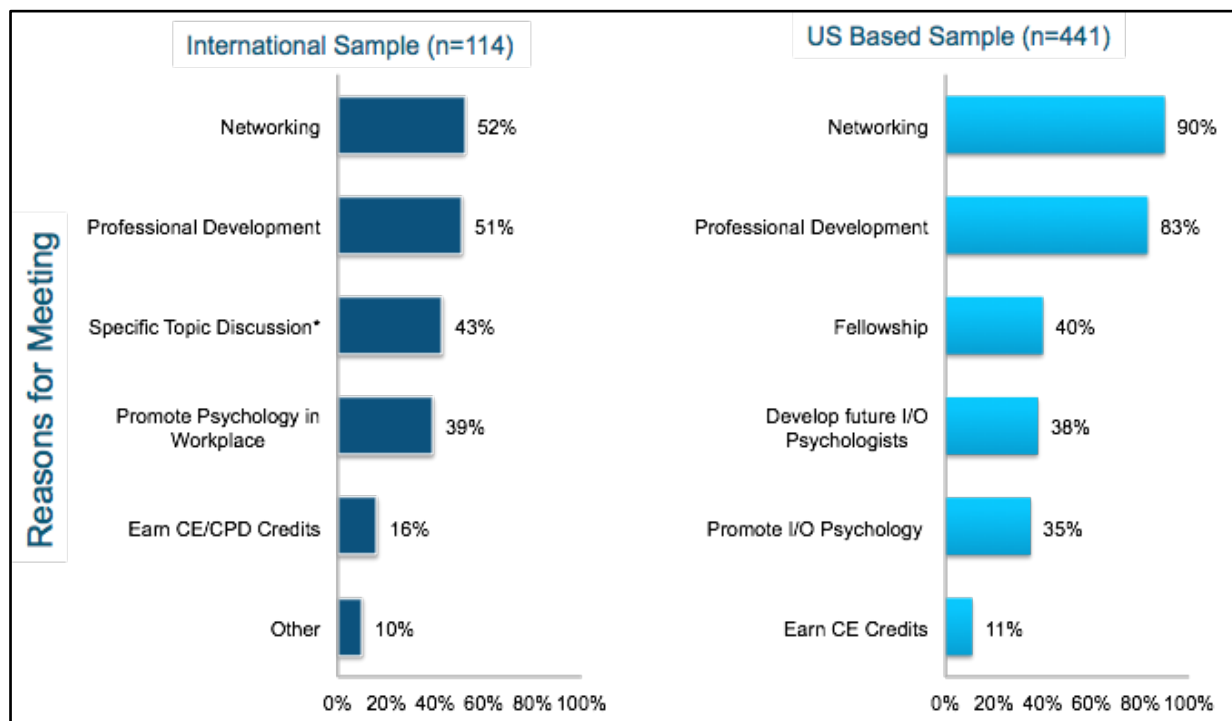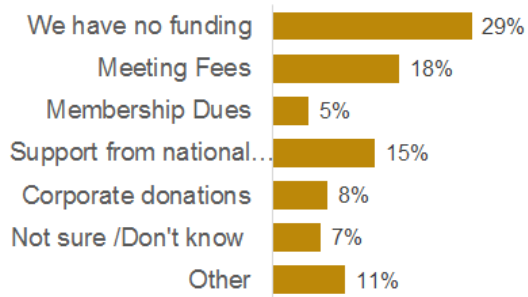

 *Specific topics may include leadership, women's issues, licensure, etc.

How Often Do Local WOP Groups Meet?
Most respondents who belong to a local group report that their local group meets quarterly (28%) or monthly (25%). Examples of those who chose "other" include meeting weekly, every 6 weeks, intermit-tently/spontaneously, biannually, or 6 times a year.

|	
We have no funding	29%
Meeting Fees	18%
Membership Dues	5%
Support from national...	15%
Corporate donations	8%
Not sure /Don't know	7%
Other	11%

Organizational Funding
When asked how the local group receives funding, the most common response was that they have no funding. The second most common source was meeting fees, followed by support from a national professional organization or association.

Understanding the Life Cycle and Related Needs of Local WOP Groups

When asked how long local groups had existed, the responses varied widely from those who are just starting to those who have been around more than 15 years. We find that the needs of a group tend to vary based upon the stage of their life cycle. As you can see, many of the groups were fairly new, with about one third of respondents who belong to a local group indicating that their group is less than 5 years old, and the modal response being less than 2 years.

Your group has existed for...

Unsure	0-2 yrs	3-5 yrs	6-10 yrs	11-15 yrs	> 15 yrs
15	18	17	3	9	15
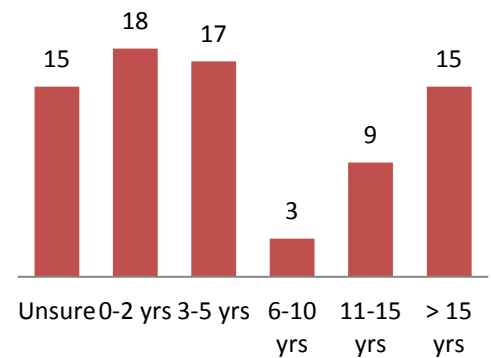
Start Ups
Start up groups can benefit from having models that help them get off the ground and a way to reach out to other professionals in their area. The Local Group Toolkit available on the SIOP website is designed to help these groups get off the ground. (Toolkit for Local I-O Groups: Four Steps to Creating a Local I-O Group. http://www.siop.org/UserFiles/Image/Local-IO/SIOP_2014_Local_IO_Groups_ToolKit.pdf)

New Groups (1-2 years)
New groups are working through the details of membership, meeting formats, and convenient times and meeting locations.
Interestingly, we can see that there is a lull in the 6 to 10 year range. We believe this may be due to the role of leadership within local groups. Groups are often initiated with the energy of one or two individuals, and when these individuals get burned out or move on, the groups may languish and disband. Creating a strong succession plan may help bridge groups through this risky time period.

Mature Groups (15+ years)
Groups lasting 15 years or more have been around long enough to be stable. They have figured out how to maintain and sustain their membership and transfer of leadership. Individuals in these established groups may be interested in helping to promote and support other groups.

Forging Connections

The US and AOP local group committees are reaching out to members through their conference booth events at SIOP, EAWOP, and ICAP 2018; they have helped to launch several new groups and connect many to existing groups through these efforts.

Most recently, the EAWOP planning committee, consisting of Anna Erickson, **Barbara Kożusznik**, Ginger Whelan, and Corinne Williams, organized a local WOP information booth at the 2017 EAWOP Conference in Dublin. The purpose of this booth was to communicate the benefits of local groups, connect individuals to local groups, and provide support for the creation of new local groups around the world. Over 300 EAWOP participants visited the booth and participated by placing a pin representing their home on a map, writing "Get Connected" in their native language, reviewing our survey results, or signing up to join or create a new group in their local community.

Future Focus

The enthusiasm of local WOP group members that we encountered at EAWOP and SIOP conferences is contagious. They fill the gaps that can exist in feeling connected to wider organizations and help to bring a sense of belonging and identity to I-O psychologists (often in remote places). Our survey data supports this by showing the benefits of and appetite for local WOP Groups. Whether it is to meet like-minded souls or to hone your I-O skills, we encourage you to join or form a local WOP group. Please do contact any of us or go to the AOP website (http://www.allianceorgpsych.org/) for more information about how to get started. By creating a strong network, we become better able to develop our field and make a difference.

Notes

[1] Because of the method of survey distribution, it's difficult to calculate an accurate response rate. For example, 34% of respondents indicated they belong to two or more of these professional organizations. In addition, surveys distributed to BPS-DOP members were done by inviting members to participate via social media.

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On the Legal Front: May You Live in Interesting Times

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EEOC

The opinions expressed in this article are those of the author and not necessarily those of any government agency. The article should not be construed as legal advice.

The apocryphal Chinese curse in this article's title was popularized in a speech by Robert Kennedy in 1966.[1] It has renewed currency.

Uncertainly Interesting

Contributing to the interest is uncertainty regarding federal government policy and regulation. Here is a list as of this writing:

Pay Data Collection

The Equal Employment Opportunity Commission (EEOC) plans to collect pay data from employers via the EEO-1 workforce reports were put on indefinite hold as of August 29. The usual filing deadline of September 30, 2017 had been postponed to March 2018 in anticipation of the new reporting requirements. But the final clearance comes from the federal Office of Management and Budget, which reviews whether proposed regulations are unduly burdensome. The EEO-1 changes were approved previously, but there is a new administration in Washington these days. Employers provided plenty of negative comment regarding burden when the changes were proposed. Although the aim of the reporting requirements in supporting pay equity has been generally praised, opinion has been sharply divided on whether the data collection was worth the effort. Acting Chair Victoria Lipnic, who had opposed the plans when proposed, indicated that the hold did not mean a lessening of EEOC's enforcement efforts regarding pay discrimination.

EEOC Merger With the Office of Federal Contract Compliance Programs (OFCCP)

This had been proposed in President Trump's budget and had the effect of uniting antagonistic stakeholders: Civil rights advocates and employer groups joined in calling it a bad idea. Depending on one's perspective, the proposed merger could create an agency that was too weak or too powerful. OFCCP is in the business of furthering affirmative action with contractors as a condition of doing business with the federal government. EEOC enforces EEO law, sometimes suing employers in federal courts. Similarities abound, but jurisdiction, activities, and enforcement authority are real differences. Now this plan seems to be on hold, although there may be further news in September when federal agencies must submit reorganization plans in accordance with a previous presidential directive (Casuga, 2017).

LGBT Coverage Under Title VII

The courts remained divided. The Seventh Circuit Court of Appeals (based in Chicago) reversed its previous position of no coverage in an en banc[2] decision (*Hivley*, 2017). Judge Richard Posner, one of the federal judiciary's most distinguished (and controversial) figures, made his own news in a concurring opinion on the role of the courts in updating the law. Meanwhile, back in New York, the Second Circuit is considering whether to reverse its no-coverage precedent. The court invited EEOC, which argues for coverage, to file a brief in the case. Then the Department of Justice announced that it would file a brief in opposition. This issue likely needs the Supreme Court for resolution.

Overtime Rules

The Department of Labor (DOL) had proposed raising the annual pay limit for overtime pay eligibility under the Fair Labor Standards Act (FLSA) to **$47,476**, from the current $23,660. Although the limit had not been raised in many years, the sharp jump had numerous organizations concerned about making payroll and possibly restructuring jobs and pay plans to deal with the new limit. Implementation was halted by court injunction in response to a suit filed by 21 states and about 55 business groups, which the Obama Administration appealed on DOL's authority regarding the pay limit. On August 31, the court declared that DOL's action was invalid (State of Nevada, 2017). The court held that to be exempt from overtime provisions, the employee must be salaried, have a salary above the established minimum set by DOL, *and* have "bona fide executive, administrative, or professional [EAP] capacity" duties. By raising the minimum salary level, DOL effectively negated the duties component. The salary limit protects employees who are paid so low that it was unlikely that they have bona fide EAP duties, but it should not make low-paid bona fide EAP employees eligible for overtime. Although further appeal is possible, on July 25 DOL had announced that it was seeking input on the pay level and other factors that have long made determining coverage or exemption for overtime a confusing affair. There are a few additional matters, such as indexing the pay level for automatic increases and having multiple levels depending on region and position (Yoshor, 2017).

"Persuader" Rule

This DOL regulation would have called for disclosure of advisors to management regarding union elections; it would include attorneys, which stirred concerns of compromising the attorney–client relationship. This also was put on the shelf by court injunction; DOL announced that it would start new rule making.

Wellness Programs

Just when we might have thought that this controversy was over, a federal court ordered EEOC to explain its rules on August 22. The issue is how much of a discount can employers give on health plans for voluntary participation in wellness programs and still maintain the program as voluntary. Initially EEOC took a relatively hard line on these incentives because of the Americans with Disabilities and Genetic Information Nondisclosure Acts. But employers complained that this position contradicted support for such programs in the Affordable Care Act ("Obamacare"). EEOC subsequently issued final rules that set the cap on incentives at 30% of the cost of the health plan; the Americans Association of Retired Persons objected that this was too high a cost for nonparticipation to be voluntary; the court ruled that EEOC did not provide an adequate explanation for its rules; so, the rules are not final yet. However, the court ordered that pending resolution they be kept in force to prevent confusion.

Joint Employer

This is an issue that crosses multiple agencies. A corporation may involve several independently owned franchises. Likely the parent corporation has contracts with the franchises that support standardization of operations to protect the corporate brand. If that standardization applies to employment issues (or, arguably, indirectly applies, or potentially applies), then the parent corporation may have responsibility for what the franchise is doing. This can greatly increase liability for the parent; the question is whether it should. In EEO law the issue can come up when a temporary employment agency cooperates with the client-employer in discrimination for work assignments. DOL had announced a rollback of 2015 and

2016 guidance on June 7 and will hold hearings toward rule making. The Save Local Business Act was introduced in the U.S. House of Representatives in July and would mandate a direct control standard for joint employer status under FLSA and the National Labor Relations Act.

Not-So-Free Speech

Then there is the uncertainty with how to deal with incivility in the workplace, a concern heightened by incivility that has generally infected discussion of public issues. One version of the concern is what to do with employees who openly support "hate groups," a term likely open to interpretation. Federal law likely does not afford protection to employees in the private sector. The Constitutional guarantee of freedom of association is a possibility for government employees. State laws prohibiting "lifestyle discrimination," sometimes associated with protecting employees who engage in lawful behaviors such as tobacco smoking at home, which may run afoul of an employer's efforts to promote a healthy workforce, might also be a possibility, depending on the breadth of the state law (Smith, 2017). Perhaps the issue for the employer when some employees have such affiliations is the business need for to maintain a well-functioning workplace. Having an employee openly contemptuous of other employees because of their demographics might be disruptive.

If group affiliation is a hot issue, hotter is derogatory speech directed by some employees at others. When such speech is severe or pervasive,[3] and directed against someone because of protected class, federal EEO law against harassment may apply. The employer, when put on notice that an employee's conditions of employment are affected by discriminatory acts, is obliged to act.[4] But an employer may want to put a stop to such behavior long before it becomes material for a lawsuit. The first question in such cases is whether the behavior violates law or employer policy. Unlawful behavior demands a corrective response. Policy may be more ambiguous, starting with how bright was the line between acceptable and unacceptable behavior for the perpetrator. Whether the behavior contradicted organizational values or impacted other employees can be considerations. Yet another perspective is whether the speech endorsed prejudicial workplace stereotypes or was a protest against perceived exclusion. The firing of a Google employee, James Damore, regarding his alleged views on the suitability of women for tech jobs captured national attention (Berman-Gorvine, 2017). Damore subsequently indicated that he was taking legal action against Google over diversity practices that he and others found objectionable. He filed a complaint with the National Labor Relations Board (NLRB). The specifics are not clear, but a strong possibility is that the complaint involves alleged suppression of protected concerted employee action: the right of employees to band together for mutual protection and support, and to speech that supports that action.

That brings us to NLRB's stand on derogatory speech[5] associated with concerted action. Previously the agency made news by ordering reinstatement of employees fired for making derogatory comments about management on social media. The most recent round had the Eighth Circuit upholding reinstatement of an employee (*Cooper Tire and Rubber Co.*, 2017) who had shouted racial insults during a labor dispute.[6] The employer had locked out the employees and brought in replacements, many of them African Americans, when negotiations to renew the collective bargaining agreement failed. The regular employees picketed the company and the insults came from an individual on the picket line. The employee was fired; an administrative law judge (ALJ) for the NLRB ordered reinstatement, overturning an arbitrator's decision upholding the firing; the ALJ's decision was upheld by the Board; and the company appealed. The appellate court majority held that judicial precedent cut some slack for picket line language; the objectionable behavior did not amount to incitement to violence or coercion against the replacements, nor did it rise to harassment under Title VII. On the latter point, the company had argued that it had a "legal obligation under Title VII to apply its lawful policy prohibiting harassment to racist statements." The court ruled that, regardless, there was no obligation to fire the employee; a warning may have been sufficient.

This was a split decision. The dissenting opinion begins, "No employer in America is or can be required to employ a racial bigot. … [I]n this case the Board predictably decided not to defer [to the arbitration decision], relying upon strained pretenses and a contorted review of the arbitrator's award to reach its desired result." The opinion continues by noting that the language was racist, the union had warned picketers not to use such language, and despite the absence of a collective bargaining agreement labor and management had agreed to arbitration regarding the firing. The arbitrator's decision should have ended the matter. "Finally, I note that this court again improperly expands the list of cases that support the NLRB's pattern and practice of reconciling facts and construing issues most favorably to labor-union interests, usually by means of its cadre of ALJs, as here. … Thus, this untethered course of action by the NLRB should be aggressively repulsed" [case citations omitted]. This concluding comment indicates a context for evaluating the employee's behavior beyond the picket line context. Having to consider the contexts of racist speech does not allay the uncertainty of what the proper response should be regarding the offending employee's status in the workplace.

NLRB's tolerance for derogatory language in the service of concerted employee action also drew negative attention in the EEOC's report on workplace harassment (Feldblum & Lipnic, 2016). Civility matters. One argument of the report was that diversity efforts directed toward harassment tend to be oriented toward reporting bad behavior and containing employer liability; there is not enough done with organizational culture so that bad behavior is generally regarded as unacceptable and so does not occur, or is called out if it does occur.

There is reason for employers to do more, above the legal and ethical considerations. Derogatory behavior directed at individuals because of their demographics harms the performance of the individual and ultimately of the organization. See Jones, Peddie, Gilrane, King, and Gray (2016) for a meta-analysis of subtle and overt discrimination correlates. The subtle form can be as deleterious as the more overt kind.

Implications for I-O

This article is not going to resolve the uncertainty it has presented. Resolution of regulatory matters depends on government action. What to do about the underlying substantive issues is I-O work and very interesting—no curse intended.

Whether or not pay data becomes part of the EEO-1 reporting process, data can afford practitioners the opportunity to examine proactively organizations' pay practices, forestalling litigation and improving the effectiveness of the practices where deficiencies are discovered.[7] FLSA has been discussed in this column (Banks and Hanvey, 2016) as having opportunities for I-Os. Job analysis, establishing bona fide EAP duties, and promoting employer compliance are some areas; should DOL revise the complex process of determining who is exempt for overtime, surely there will be a need to help organizations get in sync with the revisions. I-O has something of a reputation for being a "persuader" against unionization efforts; arguably, helping implement personnel systems that promote both organizational effectiveness and justice such that unionization loses its appeal is not going over to the Dark Side. In any event, practitioners in this area may have an interest in how much their role gets reported. The attractiveness of employee benefit programs, including wellness, to employees and the effectiveness of those programs to management are also in our professional bailiwick. Whether our activities get caught in a joint employer bind is another feature of our professional environment. The legal status of LGBT discrimination may be in the hands of the courts, but promoting an inclusive workplace is very much in the hands of our profession.

Impetus for a renewed look at inclusiveness comes from several sources. If "diversity" was about getting previously excluded people in the organizational door, "diversity and inclusion" extends the concern to what happens once they are in, an extension from a diverse workforce to a diverse workplace. The

above-mentioned EEOC harassment report noted that antiharassment compliance training is a necessary but not sufficient component of ending harassment; the ultimate measure of success is changes in attitudes and behaviors. There is a line of legal scholarship that has been critical of diversity programs because they have little to show in achieving those attitudinal and behavioral changes.[8] Rather, the criticism is that these efforts are used in litigation by employers to indicate that they are doing something about discrimination when the programs are ineffective. Presumably I-Os would be well situated to take on this issue.

How various forms of discrimination that do not rise to the level of legal harassment undercut employee engagement and efforts to recruit and retain talent is a promising area for research and practice. Attaining positive results without imposing a "political correctness" that could defeat the very change it was supposed to advance will be a challenge.

Robert Kennedy said that his times were characterized by danger and uncertainty. If that applies to our present situation at the intersection of I-O psychology and employment law, then this writer hopes that his observation that such times are more open to creative energy also holds.

Notes

[1] "There is a Chinese curse which says 'May he live in interesting times.' Like it or not we live in interesting times. They are times of danger and uncertainty; but they are also more open to the creative energy of men than any other time in history." Retrieved from http://www.phrases.org.uk/meanings/may-you-live-in-interesting-times.html.

[2] This is a "legal French" expression meaning "in the bench," i.e., involving all the regularly active, non-recused judges on the court; usually cases before a U.S. Circuit Court of Appeals are heard by a three-judge panel.

[3] "Or" is important; a single instance may suffice for a legal claim. That standard was recently reinforced in the Third Circuit in *Castleberry* (2017). Bernstein, Slocum, and Lesica (2017) noted this case and two similar recent nonprecedential orders in the Second Circuit.

[4] Factors that affect liability could include whether the harasser was a supervisor, coworker, or nonemployee; whether the employer had a sufficiently effective mechanism for reporting and remedying the problem; and whether the victim invoked that mechanism such that the employer was aware of the problem and (should have) acted to resolve it.

[5] The decisions discussed here involved NLRB's composition prior to President Trump's administration.

[6] The court mentioned the statutory basis for the protection of concerted activity in this case: "Section 7 of the Act guarantees employees the right to "assist labor organizations … and to engage in other concerted activities for the purpose of collective bargaining or other mutual aid or protection." 29 U.S.C. § 157. Section 7 gives locked-out employees the right to picket. Section 8(a) prohibits an employer from interfering with, restraining, coercing, or discriminating against employees in the exercise of their Section 7 rights. § 158(a)(1)-3)" [case citation omitted].

[7] In the absence of a government reporting regulation, the organization can use "better" data and analytic techniques than might have been mandated. But when unearthing material that could potentially fuel a lawsuit, the usual advice is to have legal consultation before digging.

[8] See King and Gilrane (2015) for an introduction to some evidence-based approaches. King and her colleagues have also has published research on diversity program effectiveness.

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Leadership Education in the Digital Age:
Building and Managing a Set of Professional Alliances

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Why Managers Cannot Lead All in Their Teams

In view of the recent discussions of the scientist–practitioners gap in *TIP*, we would like to alert our practitioners to important findings that research: prescribed behaviors for leaders from classic leadership theories (transformational leadership theory, Kouzes-Posner leadership theory, Ohio State University leadership theory) were unrelated to follower performance unless the proper states of three big mediating conditions were first established. The *big 3* mediating conditions should be no surprise to our fellow practitioners, because they have seen the unfortunate frustration of both leaders and followers when these necessary conditions are bypassed.

The big 3 beliefs of all followers about their leader necessary to instill the mediating conditions are: Followers must believe their leader is (a) competent, (b) trustworthy, and (c) benevolent in working with them, and followers must believe their leader reciprocates and believes the same about them. Once these beliefs are established, the prescribed leader behavior becomes related to follower performance. A psychometrically sound measure of the state of the necessary variables is available from the authors without charge (Graen & Schiemann, 2013). In addition, methods for CEOs, managers, and HRMs to meet these conditions are described in the leadership literature recommended (Graen & Cañedo, 2017).

Given these findings, we report in this paper on the necessity to supersede our traditional leadership education and training programs to make them compatible with emergent science and art. We concluded the following from our 2-year review of 21st century leader–follower alliance: (a) Necessary conditions have been identified which together mediate the relationship between prescribed leader beliefs and communications and later follower performance; (b) current prescriptive protocols need to be changed to focus on establishing and maintaining the big 3 variables, and (c) clients need to be made aware of the harm possible without these necessary mediators (Graen & Cañedo, 2017).

Leadership education is a broad field of understanding the (a) evolution, (b) nature, and (c) future of the uniquely human process of cocreating the big 3 necessary conditions. In general, methods prescribed to meet these necessary conditions involve education to appreciate the larger context of leaders and followers in teams and coached practice to build confidence in the new protocols. With teams and net-

works of these alliances, leaders may multiply follower collaborative performance and happiness (Sparrowe & Liden, 2005). We feel it is a fulfilling growth experience to be a follower of a big 3 leader, and it's too important to be left to amateurs. It's an exciting time to be in leadership education.

Recent History

The state of leadership research by the end of the last century was struggling with a suspected "missing-link." For example, research established proper practice of transformational leadership theory was only effective for a minority of a team, as demonstrated by later follower performance (Hollander, 2012; Riggio & Ono 2000). The supporters of transformational theory suggested that their missing link was how "authentic" or "real" the followers described their leaders to be (Bass & Riggio, 2006). Unfortunately, psychology cannot find an acceptable measure of a leader's true self or soul to compare with observed behavior (Hollander, 2012). Other constructs with acceptable operational definitions were proposed as the missing mediator (Campbell, 2012; Gottfredson & Aguinis, 2016). The latter study performed a mega-analysis of 3,327 studies involving 930,349 observations. This analysis was a comparative structure equation study of meta-analyses. The tested mediators were leader–member exchange, organizational citizen behavior, procedural justice, role ambiguity, role conflict, overall job satisfaction, trust in leader, and satisfaction with leader. The final results indicated the best fitting mediator was leader–member exchange quality. After this breakthrough investigation, we asked the question: What are the implications for leadership education and best practice? This paper begins to answer this question.

Formal and Expected Employment Contracts and Interpersonal Alliances

We think the basic concepts to be identified, understood, and taught are part of a network system yielding the leader–follower alliance system of protocols. Briefly identifying the differences between the more important contributors would include (a) legal employment contract, (b) psychological employment contract, and (c) LMX-alliance. These three concepts may be confused and need to be distinguished. An employment contract is a legally binding agreement between an organization and an applicant describing their exchange relationship of performing satisfactorily on a job and the compensation paid. In contrast, a psychological employment contract contains the hopes and dreams of expected outcomes not included explicitly in the formal agreement. Employees may become dissatisfied when the realized outcomes do not include their hoped-for items. A leader–member two-person exchange alliance is an agreement to collaborate on protecting and serving a team in exchange for professional mentoring of the follower by the leader. Such an alliance is independent of the formal employment contract between a follower and an organization and the psychological employment contract between an employee and an idealized employer.

Expanded Realistic Model of Project Team Performance

The traditional 20th century model of the leadership scenario focused on the relationship between leader influence attempts on a team and team performance. The characteristics of actors, behavior, and context were variable from one situation to another. The theory apparently applied to all leaders and teams performing all projects in any context. However, the relationship of interest was found to apply only to a minor proportion of team members. The more realistic 21st century model has an enlarged scenario including (a) CEO delegating a project with strategic implications to (b) a responsible executive who delegates the operation to (c) a team with a (d) leader and (e) an executive team coach. The executive is responsible for meeting the requirements for the proper use of a project team (Hackman & Wageman, 2005). The new model assumes that team performance may be influenced for good or ill by all the actors. Realistic project teams typically contain a mixture of LMX-alliances (leadership)

and command and control (position power) relationships. These complex team scenarios need to be analyzed by professionals for training and development needs (Steiber, 2011).

New Team Deliverables

Instructing the 21st century model of project team leadership development with its big 3 mediating variables may result in a more productive team in terms of (a) improvements in an organization's sales volume, (b) annual growth in sales, (c) sales volume of new accounts, (d) market share, and (e) number of new products sold (Gottfredson & Aguinis, 2016). Operationally the missing link of achieving leader–member interpersonal big 3 alliances is assessed by the quality of interpersonal respect of competence, trust in character, and benevolence of a relationship measured by "LMX-TEAM" (Graen & Schiemann, 2013). The above company-level outcomes of standard unit improvements were measured by the LMX-A, and estimates were shown for four different interventions. The most positive outcomes were for (1) initiating structure with the highest gains, followed by (2) consideration, (3) transformational leadership, and (4) contingent rewards in that order. These are very strong, practical results. The study continues with the megaconfirmation that a successfully negotiated interpersonal leadership alliance is a necessary condition, which must be established, as indicated by agreement between leader and member independently, on the LMX-A measure (Gottfredson & Aguinis, 2016).

This is probably the necessary missing link in our leadership theories: *Without an alliance agreement, the theories of leader incentive such as transformational conversion, transactional contingent rewards, consideration, and structuring do not relate to follower performance for all*. This means that offers of better conditions do not relate to follower performance because the offers are perceived as lacking competence or trustworthiness or benevolence or at least one of the big 3 conditions. Students of leadership need to understand the circumstance and problem-solving competence of leaders planning to cocreate with followers their best customized team. Becoming part of an active, supportive, psychologically safe, and fulfilling leadership team with collaboration from both passive and active peers seems to be an experience worthy of good feelings and fond memories.

New Workplace Experience (NWX) Context

The findings outlined in this paper should not be surprising, given the increasing need for advanced talent management innovations required to create and sustain a talent pipeline for difficult to find and harder to keep knowledge-worker professionals (Graen & Grace, 2015a, 2015b). Workplace culture has emerged as a defining element for competitive differentiation in the global talent marketplace, driving the need for a New Workplace Experience (NWX), as described by the editors of the *Academy of Management* (AoM) *Journal* (Gruber, de Leon, George, & Thompson, 2015). The context that the Journal editors describe for this new behavior is holistic in its scope and includes " organizational design and related incentives and management procedures; the task and associated business process design; the support tools and information services that enable the execution of the task; the physical and virtual environment in which the task takes place; the internal interactions between employees within a business or organizational function; as well as between functions and the extended enterprise and its partners and customers, and the organizational culture and communications and human resource support programs" (p. 4). What is missing is the required leader behavior that has the power to transform human relationships and can make the promise of a new workplace experience authentic: the LMX-Alliance Agreement.

Executive Team Coach (ETC)

Executive coaching may improve the development of agreement between members and leaders regarding what each is authorized to do, the dynamic performance priorities, the budget, latitude, the rules of

engagement, communications, and the quality of alliances (Fairhurst & Uhl-Bien, 2012). Disagreements on these issues may lead to problems of follower performance and team disappointment. As the team priorities change and signals are missed, teams fall into chaos. Coaches can provide the trustworthy monitor, mentor, and cheerleader for the entire team. This service may be developed in house or sub-contracted. The mission of executive team coaches is to instruct a project team on clear alliance agreement and the stages of moving followers from strangers to associates to junior partners and to finally shape the team for performance. Coaches may contribute substantially to winning teams (Weer, Di-Renzo & Shipper, 2015). This means all are valuable assets and trustworthy partners. Coaches can supply communications from followers to executives for clear recognition of needed priorities. The unfortunate performance management practice of quarterly feedback is a failure (Corporate Leadership Council, 2012) and needs to be replaced by continuous performance feedback and effective executive coaching.

Leadership Educators

Some important implications for practitioners include the following:

1. Our traditional model is obsolete.
2. The 21st century theory is built on the very rock of the LMX-alliance.
3. Both leader and follower scripts, roles and norms, and computer applications need to be internalized through proper education at the bachelors and master levels.
4. In addition, the support scripts, roles and norms of CEOs, project executives, and executive coaches need to be included in the scope of study.
5. Knowledge of the design and development of effective and engaging ecologies need to be studied.
6. Practitioners in their field need to learn the facts and instruct them with the understanding of the recommendations and protocols.
7. Early and continuous attention is needed for recent hires employing development theory to enable Millennials to mature professionally. They are the future.
8. Design and develop new Millennial-effective people systems, e.g., new age performance management systems.
9. Retrain existing and new leaders in the new theory and practice.
10. Commit to the leader–follower alliance system for the long term.
11. Celebrate small wins and enjoy flexible designs.

Finally, the main reason team leaders cannot lead all of their direct reports are many, but most important is the "fear of failure" due to a lack of education in the theory and skills needed to dare beginning the initial private conversation about each employee's hopes and dreams for a wonderful career of personal growth and helping people. As for us, let's share what we believe will be useful. A generation is a terrible thing to waste by not really grooming its leaders and members to experience the promised joys of the new work life. Finally, we conclude I-O psychologists should be on the new design teams to fit the new systems into different organizational contexts.

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A "GLOW" (Global Living Organizational Wage): Where We Stand on the Issue of Living Wages

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Addressing at least two crucial United Nations Sustainable Development Goals (SDGs) (Number 1, Eradicating Poverty, and Number 8, Ensuring Employment and Decent Work) is a movement with a bright fu-

ture. Project GLOW (Global Living Organizational Wage) continues to gather global interest, and momentum, from Pretoria and Auckland to Geneva and Washington, DC at the recent American Psychological Association (APA) Convention.

Project GLOW is a unique global network of research service and teaching hubs (SIOP, 2017). GLOW began in 2016, prompted by the prior work on poverty eradication by Stuart C. Carr at Massey University, Auckland, New Zealand. As pointed out in a superb summary of the project's aims and ambit, and links to the United Nations SDGs (Scott, 2017), in 2016, half of all people classified in the world as "extremely poor" were not unemployed but working, in jobs. Dealing with "working poverty" has become a strategic objective for poverty reduction. The road to achieving this is by establishing true living sustainable wages that enable people (and organizations) to not only survive but, more importantly, to flourish and thrive. This emphasis on shared prosperity is emphasized in SDGs 9 and 10, for example.

To date by comparison, most Living Wage campaigns have been econometrically based and largely fail to take account of psychological, business, and broader societal benefits (for an exception, see for instance, http://laane.org/downloads/Examining_the_Evidence.pdf).

No surprise, then, that employers, driven by the profit motive, continue to be reluctant to raise wages beyond what local markets demand. However, a growing body of research by industrial-organizational psychologists is exploring in more empirical detail the costs and benefits, human and material in terms of jobs and job growth for example, to different wage levels, including to setting wages at a legal minimum level, cost of living level, and quality of living level. Uniquely too, the project is planned to run for 50 years, to examine the intergenerational impacts of living wages on our descendants' education, on health for the future and on sustainability across all 17 of the SDGs. GLOW has implemented the network partnerships (SDG17) to at least begin this work partly in response to the setting of minimum and living wages by economic fiat instead of in consultation with the I-O psychology of what the differences in income actually mean for everyday life, work life, and organizational sustainability. Indeed, a recent Treasury report from NZ warned that implementing the campaign living wage would risk job losses by sending companies and SMEs to the wall—even though the assessment did not apparently include any I-O research from the past 50 or so years on potential upsides from job fairness, satisfaction, commitment, engagement, retention, and so on. This may be as much a problem of our own making as from the dominance of macroeconomics in the policy space. GLOW is intended to offset that silence with evidence.

Project GLOW defines a living wage as a wage range in which both quality of life and organizational efficiency may undergo a significant upswing but below which people's inherent agency (and jobs growth) may languish in poverty traps. GLOW seeks to answer the question, using purchasing power parity, "Is there a global living wage that enables people, organizations and communities to prosper and thrive?" It also advocates for a global living wage throughout the planet by informing wage policy setting at social, organizational, sector, national, and international supply chain levels, and informs job creation, thereby reducing unemployment.

Project GLOW now has at least one hub in more than 25 countries, spanning trade routes and cities within and between them. Hubs represent interdisciplinary, cross-sector partnerships between work and social sciences, practitioners, scholars, and community groups, including professional and labor associations. As mentioned above, it has an extended time span of 50 years. Thus, it is intended to span multiple generations with the capacity to examine the longer term dynamics of living wages on income mobility and shared prosperity. In keeping with this multigenerational perspective, GLOW places a strong emphasis on building capacity for the future, for example, by creating applied research and service opportunities for younger generations of I-O students, scholars, researchers, and practitioners.

A few examples of recent activities provide a good overview of the potential impact of Project GLOW. By invitation, living wage research was presented in South Africa and New Zealand at the South Africa Science Congress, a regional and international conference focused on evidence-based policy development. The presentation, by Molefe Maleka and Ines Meyers, made front page news in Pretoria (Nkosi, 2016). Colleagues in Thailand are working with a number of stakeholder groups, including policy makers, on a Buddhist Economics perspective on the living wage. A cluster of hubs entitled "Money and Freedom," based in Malaysia, Indonesia, and the Philippines have presented at the Asian Association of Social Psychology Conference (Auckland, NZ) on their research on the living wage aspect of cash transfers to single mothers in the Manila slums and across low-income groups to ascertain the social and business benefits, as well as shared prosperity, from living wage policy and levels of income/wages (Carr, 2017).

In New York City, Drs. Berry and Carr copresented/participated in a public forum organized by Fordham University on "Positive I-O Psychology: Local and Global," showing how Project GLOW benefits humanity in the USA and globally; the ensuing discussion suggested an expansion of the living wage concept to include not only the monetary wage itself, but other contributors to quality of life, such as employee benefits, particularly in the health and education arenas.

Also in New York City, Project GLOW leaders in SIOP submitted a statement to the United Nations 2017 Commission for Social Development (CSD), titled "The Sustainable Development Goals Need to Build a Social and Business Case for Living Wages," which became part of the official record of the meeting and was circulated in accordance with paragraphs 36 and 37 of Economic and Social Council resolution 1996/31. In addition, a panel event held in conjunction with CSD included a presentation delivered by Professor Molefe. The event, titled "Decent Work as the Most Important Strategy for Poverty Eradication," focused on decent work as the pathway out of poverty to achieve sustainable development for all. Professor Molefe's presentation described "Partnerships to Foster Living Wages: Project GLOW." Dr. Walter Reichman was the discussant at the session, and his remarks included the following cogent points. Dr. Reichman has found mixed results in the literature on living wage, with as many studies that showed an increase in unemployment as found an improvement or no change in employment when minimum wage was instituted. However, the case for pursuing a living wage can be made stronger by finding a tipping point: the point where wages and organizational sustainability are both guaranteed. This tipping point has yet to be established, and indeed will vary from country to country (even within countries) and perhaps also from industry to industry. Determining this tipping point will be a key focus of future Project GLOW research and will provide an invaluable tool in the toolbox for ensuring a living wage for all.

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I-O Psychology Education and Training:
Moving Beyond Boundaries Through a Global Outreach

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What do we know about the industrial-organizational (I-O) psychology education and training (E&T) beyond the boundaries of the United States? Although phrases such as, "globalization allows for individuals from around the globe to better connect with one another" can be a common message in our academic papers, the true transparency of these borders—and the effort that we put towards reaching out beyond the United States—is underwhelming when it comes to I-O E&T. The unfortunate answer to the aforementioned question is that we do not know nearly as much as we should. With a few exceptions, SIOP's E&T resources, tools, and viewpoints have essentially been US-centric for many years. In order to counter this situation, the E&T Committee at SIOP has established a subcommittee with the sole focus on enhancing our understanding regarding the training of I-O psychologists across the globe. It is time that we truly connect with other I-O psychologists and learn from each other. Therefore, we briefly go over what we know thus far and our goals for this upcoming year, and, most importantly, we provide you with the means to give us input to further enhance what we know about the education and training of I-O psychology around the world.

What Do We Know?

Over the course of the past year, the International E&T Subcommittee has engaged in several efforts to understand the current state of I-O E&T outside of the U.S. When we first looked into the programs outside the United States, there were only 20 programs identified, based on SIOP's records of program directors and the available records provided voluntarily by program directors to the online database. Without international E&T being on the forefront of the organization until recently, this has resulted in a major oversight of many international programs not being represented in the existing database.

To counter this situation, a more comprehensive search allowed us to find over 165 programs (see Figure 1), and we strongly believe there are still a number of programs out there that we have not found. To extract these programs, we conducted a broader search using several techniques. We identified programs using information from related associations outside of the U.S. (e.g., CSIOP in Canada, SIOPSA in South Africa, EAWOP in Europe) and numerous conversations with program directors, whom we then asked to share a survey with their colleagues via a snowballing method, leading to this preliminary list of programs. From an overarching analysis, we learned that the biggest presence at SIOP from countries beyond the US comes from

Canada and Australia. Such finding is also correlated with the affiliations of the main authors in our I-O journals. Although we are happy to see the work from our Canadian and Australian colleagues, we would love to see more diversity represented in our I-O journals and at the SIOP conference.

In tandem with the generation of this larger list of programs, we also reached out to program directors and coordinators affiliated with these programs. An ongoing effort, our initial 12 responses provide deeper insight regarding I-O psychology programs' E&T internationally. From a selection standpoint, there are admission criteria that are judged as crucial across countries, such as having a strong undergraduate record and earning a bachelor's in Psychology as prerequisite. On the other hand, prior work experience, regardless if I-O-related or not, and whether they had to have a master's degree were not considered "deal-breaker" criteria for most programs.

Interestingly, there were conflicting weights applied in terms of prior research experience in I-O, strong letters of recommendation, and performance in entrance interviews. In some cases, even regional clustering (e.g., Oceania including Australia and New Zealand) demonstrated differences. For instance, the program directors from Australia ranked their interview as extremely important, whereas their neighbors from New Zealand scored the lowest in such category. A similar split was found among the two South African schools. Similar questions were then asked about the core competencies that were fundamental for a graduate student to get a job in their country. Variance regarding the importance of I-O general knowledge and skills were found (see Table 1 for details). The most important topics that emerged from this survey include leadership and management, individual assessment, and performance appraisal/management. Thus, we have begun to identify some commonalities but yet also significant differences of I-O E&T around the world.

The good news is there is a growing number of students in the United States who are seeking and accepting international employment, both faculty and practitioners. Accordingly, you may have noticed the increasing number of international jobs advertised on SIOP and related email list servs. However, are SIOP members prepared to excel as professionals in these contexts? We need to do a better job at closing the loop and learning what we should have known prior to our colleagues embarking on these new chapters in their professional lives. Questions that come up include: (a) What are the divergent norms in non-US organizations compared to the US organizations? (b) How does the tenure process work? (c) What are the students' or clients' expectations? (d) Are we using different terminology or jargon?

It is with the intention of understanding some of those questions that the International E&T subcommittee hopes to learn even more this year and in the upcoming years. *TIP* has been fundamental in helping us with the baseline knowledge as fantastic columns have emerged throughout the past few years, such as the Spotlight on Global I-O and the International Practice Forum. With your help, we hope to continue this effort by focusing on the education and training of I-O psychology around the globe.

How Do We Plan to Tackle This Challenge?

In the long run, we hope *to bring SIOP Education & Training knowledge and resources around the world, to refine our current views of E&T based on a diversity of approaches to I-O education and training, and*

to continuously maintain and grow these relationships. With a more proximal timeframe in mind, we are focusing on the following short-term goals this year:

- To continue the effort to understand how the education and training of I-O psychology happens around the world.
- To identify the needs of and gains for becoming more internationally focused in terms of I-O E&T practices and resources.
- To facilitate connections among SIOP members around the world regarding E&T best practices and resources.

Additionally, we'd like to give a shout out to our subcommittee members: **Peter Hausdorf, Tine Koehler, Nale Lehmann-Willenbrock, Rana Moukarzel, Joy Oliver, Ramón Rico, Jessica Sim,** and **Jennifer Wessel.** These goals cannot be accomplished without their help and your help.
Action Items: Where to Go From Here?

There are a number of ways in which you can get involved. We have provided some of what we know into a sharable google spreadsheet, so we can continuously build on this knowledge. More specifically, you will find the following tabs (and the excel sheet can be found HERE or by copying and pasting this link to your browser: https://tinyurl.com/I-Oeducatrain).

I-O programs abroad. Read on for a brief overview of the additional programs we found. They are all in alphabetical order by country/region. Have you heard of any of them? If you know any additional details, please add to the notes. There you can find the list of 166 I-O programs abroad, but we are confident this is not all. Do you know any others? We are looking to increase this list and get more details about these programs. If you are a program director, faculty, and/or student in any of these, please let us know.

US-based programs. This effort is not just one way, but we also want to identify US-based programs that are serving as exemplary collaborations for encouraging their students to cross geographic boundaries during their I-O training. During this effort, we learned about a PhD program in the US that has an international concentration, Florida Institute of Technology. This program allows students to focus on cross-cultural issues, study human resources from an international perspective, and experience intercultural collaboration. However, we believe there are other programs in the US that contribute to the growing and maintaining of collaborations with international I-O professionals even if they do not have a specific international concentration per se. Can you help spot these great programs? Please fill in the second tab with whatever information you may have. This could be a great opportunity to highlight some of the international accomplishments from your program.

I-O organizations. Beyond actual graduate programs, there are a number of organizations and/or associations out there that unite I-O psychology students, practitioners, and scientists. We have identified 26 of them but would love to expand such list to be more representative of the entire world. Do you belong or know of any I-O organization abroad? This could include conferences that you've been where you felt welcomed and connected with people from different countries. Learning about ways to make those connections at SIOP would be a great contribution.

Suggestions. Along with these lessons learned from I-O organizations, we can definitely go beyond that to build a repertoire of actions and resources that could be utilized by SIOP to help bridge the gap between our local and international members. There are two ways in which we can enhance this process by identifying *barriers* (i.e., what are some of the obstacles that are hindering this collaboration?) as well as *facilitators* (i.e., what are some of the actions one can take to ease this collaboration?). Those suggestions will range from more feasible and practical to more long-term ideal climate, but it is important we take them into account to start breaking those barriers sooner than later.

Volunteers. As we mentioned, this is a very young effort with a long pathway ahead. If you are interested in helping in any extent, we would love to hear about your expertise, what regions of interest, and so on. We will be considerate to the extent of involvement you desire to participate and very appreciative of any insights you have to share with us.

Contributors. Last but not least, we want to know where all these insights and suggestions are coming from. Please do not forget to provide us with your name if you have added any contribution to our Google spreadsheet, so we can recognize your efforts.

Conclusion

We are calling upon you, I-O professionals and students, to reach out and let us know (a) what your school/organization is doing with a global/international/non-US-centric focus; (b) any differences you identified among the I-O programs that are US-based versus not; and (c) if you encountered any barrier when trying to connect. If you have a lot of information, beyond what was captured in the excel spreadsheet, there is a place for you! We have developed a semistructured interview protocol to gather more nuanced information about these programs, please reach out to us. We would love to hear more about your country, recent initiatives, and ongoing research projects!

We look forward understanding, facilitating, and learning from I-O psychology around the globe. To provide any feedback or insights on the international education and training of I-O psychology, please send an email to the following addresses: Jennifer.Feitosa81@Brooklyn.CUNY.edu, MShuffl@Clemson.edu, and/or JosephAllen@unomaha.edu.
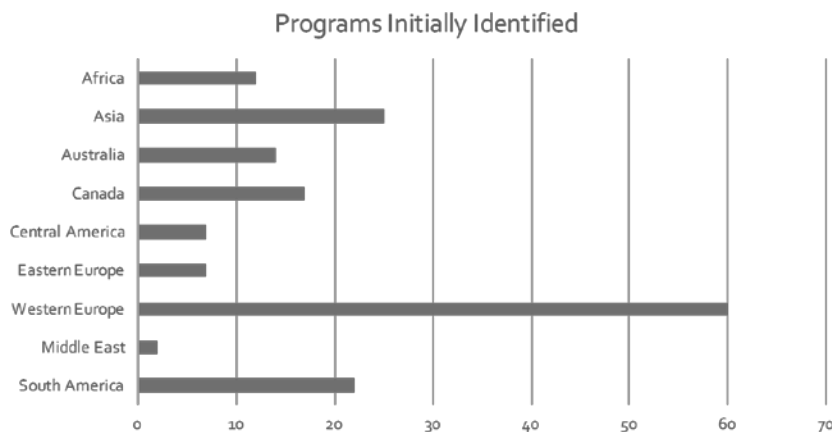

Figure 1. Number of programs initially identified per region

Table 1

I-O Core Competencies and its Perceived Importance

Core competence	Overall mean (out of 5.0)	Europe (N = 3)	Oceania (N = 4)	Canada (N = 3)	South Africa (N = 2)
Ethical, legal, diversity, and international issues	3.50	3.00	3.50	3.33	4.50
Fields of psychology	3.42	4.00	3.25	3.33	3.00
History and systems of psychology	2.08	2.00	1.75	2.33	2.50
Consulting skills (project-management skills)	4.17	3.33	4.50	4.33	4.50
Business skills (research development)	3.75	3.00	3.75	4.00	4.50
Research methods	4.00	3.33	4.25	4.00	4.50
Statistical methods/data analysis	4.08	3.33	4.25	4.33	4.50
Attitude theory, measurement, and change	3.91	4.00	3.50	4.00	4.50
Career development	3.82	4.00	3.50	3.50	4.50
Criterion theory and development	3.45	2.67	3.75	3.50	4.00
Groups and teams	4.18	4.33	4.25	4.00	4.00
Human performance	4.09	3.67	4.50	4.00	4.00
Individual assessment	4.27	4.00	4.75	4.00	4.00
Individual differences	3.82	3.00	4.50	4.00	3.50
Job evaluation and compensation	3.00	3.67	1.67	3.00	4.00
Job/task/work analysis	4.18	3.67	4.75	4.00	4.00
Competency modeling	3.82	3.00	4.00	4.50	4.00
Judgment and decision making	3.36	3.67	3.25	2.50	4.00
Leadership and management	4.45	4.33	4.75	4.50	4.00
Occupational health and safety	4.00	4.33	4.00	4.00	3.50
Organization development	4.00	3.33	5.00	3.50	3.50
Organization theory	3.09	3.00	2.75	3.50	3.50
Performance appraisal/management	4.27	3.67	5.00	4.50	3.50
Personnel recruitment, selection, and placement	4.18	4.00	5.00	4.50	2.50
Training: Theory, delivery, program design, and evaluation	4.09	3.33	5.00	4.00	3.50
Work motivation	4.09	3.67	5.00	3.50	3.50

How SIOP Members Are Using Social Media Professionally: Survey Results

Bo Armstrong, Tiffany Poeppelman, Jess Thornton, and Evan Sinar
SIOP Content Initiative (SCi) Task Force

The reality today is that much of the world has moved online. Many individuals, teams, and companies now use various social media platforms to network with others, maintain existing relationships, stay abreast of current news and happenings in the field, share ideas, or to share real-time updates with sim-

ilar people or groups. Additionally, we now see a significant impact on companies investing in their social media strategies for branding and hiring top talent, along with individuals who are growing their own brand online for their personal uses or professional image. SIOP members must recognize and keep up with these trends or else risk becoming irrelevant in an increasingly social and online workplace. SIOP members can tap into social media's benefits to achieve our professional goals but must also recognize the drawbacks and limitations of social media platforms.

We often hear many different reasons why individuals use social media, including:
- Keeping in touch with family and friends
- Learning and growing in our field
- Sharing ideas and research
- Staying up to date with research and trends

We have also heard many reasons why individuals do not use social media, including:
- It crosses personal or professional boundaries
- It takes up too much time in an already busy schedule
- The value of social media use isn't clear

Social media platforms mean many different things to different people. For instance, it's not uncommon to hear someone say that she or he only uses Facebook with friends and LinkedIn for work colleagues or work topics, whereas others will say that they use them for both. Sound familiar? You're not alone.

Is there a "right" way for us to be using social media professionally? Some professionals stick to certain platforms and steer clear of others. Additionally, some people commit to an "always on" strategy for social media, posting frequently through various channels (e.g., once a day), whereas others do irregularly (e.g., once a quarter). There is no right or wrong way to use social media when it comes to which platform you use or how often you use it, but we propose that one should be self-aware regarding intended uses of the tools.

We inquired as to what SIOP members see as their preferred platforms and what their views are when it comes to social media. In April 2017, we asked our members to complete a social media survey and tell us about their engagement strategies and preferences. Overall, the goal and intent of the survey was to better understand member preferences on social media to inform the SIOP Administrative Office, SIOP committees, and our membership of the best uses of social media, as well as to identify and share trends across other members.

Below are the findings from the survey along with tactics and recommendations for those new to or well-experienced with social media.

The Survey

In the SIOP social media survey, **nearly 1,300 SIOP members** responded to a 13-question survey on the following:
- Social media and related platforms most engaged with, either for professional or personal use
- How and why members engage on social media
- How often they engage on social media in a professional manner
- Open-ended comments about the most valuable and least rewarding outcomes of time spent on professional use of social media

Overall, respondents were distributed across affiliation (academic, 24%; practitioner, 45%; student, 31%) and number of years affiliated with SIOP (0 to 4 years, 43%; 5 to 9 years, 18%; 10 to 19 years, 19%; 20+ years, 20%).

SIOP Members and Social Media Platforms

- 94% of respondents use social media, either personally or professionally.
- Facebook, Instagram, Pinterest, and Snapchat tended to be used more personally
- LinkedIn tended to be used more professionally
- Twitter and YouTube were often used for both personal and professional purposes

According to recent website traffic data (Alexa, 2017), Facebook is the third most visited website in the world and one of the most popular forms of social media (Greenwood, Perrin, & Duggan, 2016). It started off as a personal platform, and though some people do use it professionally, most people continue to use it personally to keep up with friends and family. Instagram, Pinterest, and Snapchat are newer platforms. Their user bases are generally younger than that of Facebook on average (Greenwood et al., 2016), and younger people are less likely to have developed a career or specific career interests to discuss online.

LinkedIn, on the other hand, was intended to be a professional platform from its inception. It is almost entirely used for job seeking, networking, and professional development. It is no surprise that SIOP users are on LinkedIn for similar reasons.

Twitter and YouTube are not as popular as Facebook or Instagram for personal use, nor as popular as LinkedIn for professional use. They both land in the middle ground, with Twitter users likely following a variety of feeds like sports, news, entertainment, and friends and family in addition to profession-related accounts like SIOP. YouTube has been a popular site for casual video hosting and viewing for many years, though many professionals have taken to YouTube in the form of how-to videos, supplements to education (e.g., lecture videos, training content), or sharing opinions and expertise (e.g., video podcasts).

SIOP Members and Social Media Behaviors

- The most popular professional uses of social media were:
  - Reading, watching, listening or otherwise consuming content (endorsed by 93% of respondents)
  - "Liking" or "commenting" on others' content (endorsed by 67%)
  - Sharing others' content within your own network (i.e., broadly; endorsed by 53%)
- Only 43% of respondents reported posting their own profession-related content to social media
- The least popular professional uses of social media were:
  - Posting profession-related questions (endorsed by 16%)
  - Engaging in profession-related discussion (endorsed by 30%)
  - Forwarding content to others directly (e.g., via message; endorsed by 33%)

It is clear to see that the most popular social media behaviors are more passive. They require little to no effort, just reading and clicking on things that you like. This is the easiest way to use social media, though it is not very engaging. These passive engagement behaviors are a common phenomenon in online communities known as "lurking" (Muller, 2012). The less popular behaviors require more effort, and SIOP mem-

bers may not be confident in the return on investment of spending time asking questions, waiting on answers, replying back and forth, and drafting messages to colleagues. It may seem tedious or difficult to SIOP members. For example, if you wanted to ask a complicated question to your social media network, but are limited to 140 characters – not words, *characters* – to either ask or answer the question, people are just less likely to respond. If SIOP members are going to engage in social media, they need to see the ROI. There has to be something that they are missing out on that is worth the effort.

SIOP Members' Frequency of Social Media Use
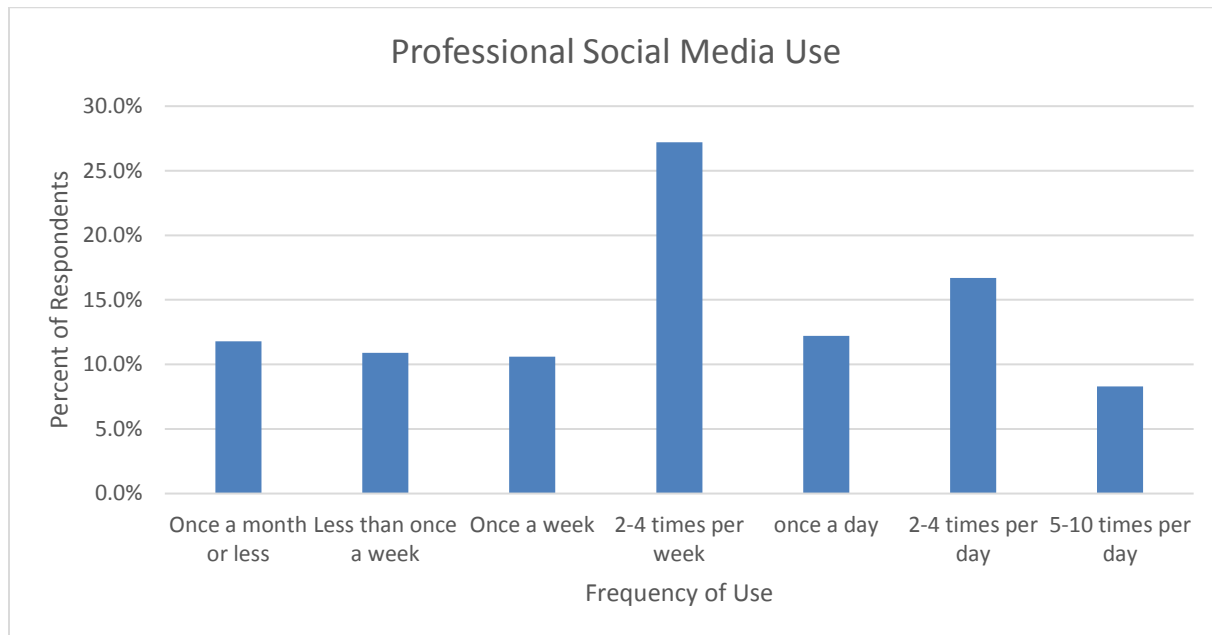
Note: Percentages do not include members indicating that they do not use social media professionally.

- Across all platforms, 12% of respondents use social media once a month or less
- 8% of respondents use social media 5-10 times per day
- 75% of respondents are weekly professional social media users
- 37% of respondents are daily professional social media users

It would appear that based on our sample of SIOP members, those who use social media for professional purposes do so on a regular basis. This may be a proxy for how SIOP members view the value of social media for professional purposes. Those who use social media on a weekly basis find some value in social media engagement, whereas those who use it less often probably don't see the value of doing so. Daily users presumably see much value in the practice, although it is unclear whether an "always on" strategy (i.e., 5-10 times per day) provides true ROI or only a perception of ROI. It is unknown whether social media provides diminishing returns over time and use or if the relationship between use and value is linear (i.e., more is better). This may vary from person to person, depending on purpose and practice.

SIOP Members' Motivations to Use Social Media

- The primary reason SIOP members are using social media professionally is for personal/social reasons (keeping up with networks, colleagues, etc.)
- The 2nd most popular reason is to keep up with news
- The 3rd most popular reason is for professional growth

Social networking sites are designed in such a way so as to facilitate communication among friends, family, and colleagues. It comes as no surprise that this is the primary reason SIOP members use social media professionally: maintaining existing relationships and networking to create new ones. As social media has evolved over time, social media home pages (i.e., "newsfeeds") have shifted from informing users about what their contacts are saying and doing to spreading content like images, videos, and linking to articles and news. Much of the I-O content on both LinkedIn and Twitter seems to revolve around sharing links to articles, blog posts, or other media. Practitioners may be most prone to keeping up with industry news in this manner, as journal subscriptions and databases are not always easily available such as in academia. Blog posts and articles also tend to be much shorter, easily digestible, and more easily understood by non-I-O colleagues than scientific articles, which helps when I-Os want to share findings or practices within their own organizations.

Next, we present brief highlights of our analyses by SIOP member affiliation and tenure.

Overall Results by Affiliation (Academic, Practitioner, Student)

- Overall, affiliations did not differ in their use of social media for social reasons, keeping up-to-date with news, or interacting with collaborators.
- Affiliation groups did not significantly differ in their use of LinkedIn; it appeared to be used at similar levels across the membership and used primarily for professional reasons.
- Affiliation groups did not differ in sharing others' content, liking/commenting on content, engaging in discussion, posting questions, or forwarding content to others when engaging with social media professionally.
- **Academic members** were:
  - More likely to use YouTube professionally, perhaps for distributing their own lectures or watching those of others;
  - Less likely to read, watch, listen to, or otherwise consume social media content, but more likely to post their own content compared to students;
  - Less likely to use social media for professional growth.
- **Practitioners** were:
  - More likely than academics to use social media for promoting their personal brand.
- **Students** were:
  - More active on Google+ and Snapchat for both personal and professional use.
  - More active for nearly all platforms among those who used them exclusively for personal purposes.
  - Less likely to use Twitter for professional purposes.
  - More likely to use social media for professional growth.

Overall Results by Tenure With SIOP

- Among those using platforms for both personal and professional purposes, more tenured members were less likely to use Google+, Instagram, Pinterest, and Snapchat. However, they were more likely to use Pinterest and YouTube for professional-only purposes.
- Length of time involved with SIOP was not related to LinkedIn use nor to use of Twitter for professional purposes.
- More tenured members were less likely to read, watch, or listen to content; share others' content; or to "like" or "comment" on social media content but were more likely to post their own content.
- More tenured members were also less likely to use social media for professional growth or to use social media for keeping up to date with news.

● We saw no differences by length of time involved with SIOP for using social media for promoting personal brand, social reasons, or interacting with collaborators.

The "Most Valuable" and "Least Rewarding" Outcomes of Social Media

We also asked SIOP members two open-ended questions regarding the "most valuable" and "least rewarding" outcomes from members' social media use. We created several visualizations of the terms used using the open-source text analysis tools Voyant and Word Tree. First, for the "most valuable" responses, we present a "links" graph showing the most frequent words, represented by the size of the words in the figure, and the most-often connected words, represented by the width of the connecting line between two words:

In this figure, we can see that SIOP members found networking with colleagues, learning new things, and keeping up to date on information in the field as some of the most common rewarding outcomes of professional social media use.

Next, we present "word tree" diagrams showing the words most often following the terms "new" and "professional" when used to describe the most valuable outcomes of social media use:

We can see from the figure on the left that SIOP members most often found new connections, information, and jobs as a result of professional social media use. From the figure on the right, we can see that members were benefitting from social media through building their professional networks and professional development in general.

Next, we present a parallel set of analyses for SIOP members' least rewarding outcomes of social media. First, we present a links graph showing a much smaller and more consistent set of responses for this question compared to the most valued outcomes identified previously:

Many SIOP members are not pleased with the amount of time social media use requires. Many are also displeased with the caliber of professional content available on social media platforms, which may provide a reason for why the amount of time social media requires does not provide a good ROI for some.

Next, we present word tree diagrams showing the words most often preceding "time" and "content" when cited as the least rewarding outcomes:

On the left, we see phrases like "waste of time," "takes too much time," and "lost time." On the right, we see phrases emerge like "lack of content," "poor content," and "irrelevant content."

Overall, it seems that SIOP members find the potential for professional networking to be a valuable benefit to professional social media use, whereas the general opinion on I-O content online receives mixed reviews. Some find value in the online content, noting that it aids in learning and professional growth, whereas others find it lacking or irrelevant. This dichotomization is interesting to say the least, prompting new questions to investigate. For example, are SIOP members consuming the same content across Internet? Perhaps one group is consuming valuable content, whereas others are not finding it or are using another platform. Personal preferences are likely to play a large role here as well. What one person finds novel and interesting, another may find as last year's news. It is also possible that academics, practitioners, and students may all value different content and activities online. Thus, we analyzed the text responses further, looking for differences by social media platforms, tenure with SIOP, and other characteristics.

Key findings from this analysis:
- More tenured SIOP members were more likely to cite "networking" and "colleagues" as high-value social media outcomes, but less likely to use the word "new" than newer SIOP members; that is, long-term SIOP members get value from the connections made or maintained through social media aspects, but truly new information is rare.
- Members extensively using social media for professional purposes more often cited "content" as the LEAST rewarding part, showing their struggles to distill quality from the massive range of content available.
- Members using social media for professional growth were less likely to cite "colleagues" as a high-value outcome, yet those using social media to promote their personal brand were more likely to cite "network" as a valuable outcome.
- In terms of individual social media platforms, Google+ users more often cited "new" when describing high-value outcomes, but also "content" as least rewarding. Pinterest users more often used "professional" to describe high-value outcomes, but also found social media "content" less rewarding. Twitter was more often linked to the high-value outcomes "network" and "new," but these users rarely cited "colleagues" when describing high-value outcomes. YouTube users also rarely cited "colleagues." Facebook, Instagram, and LinkedIn were more balanced, neither more nor less likely to be associated with the descriptors above.

- Members who actively posted their own content or engaged in discussion on social media were more likely to list "network" as a high-value outcome; however, "professional" was rarely a high-value outcome for those who use social media more passively, who limit their involvement largely to reading/watching others' content.
- Members who do share others' content were more likely to cite "professional" as a high-value outcome yet appear to sort through extensive poor content to find good material to share: "Content" is commonly a least rewarding outcome for this group.
- Those actively liking and commenting on others' social media content more often cited "network" as a high-value outcome but also "content" as least rewarding; these users are seeing the connectivity benefits from social media engagement; however, they're also exposed to (and likely commenting on) plenty of poor quality content.
- Notably, the use of responses such as "none," "nil," or "N/A" also differed by respondent group: Both practitioners and longer-term SIOP members were less likely to give these responses for the least rewarding question; that is, both groups were more likely to see no rewards from social media use. Students, however, were more likely to give these responses; they are less likely to see no rewards from social media use.

The Next Social Media Platforms for SIOP to Adopt

We asked SIOP members in an open-ended question to provide social media channels they recommend SIOP adopting for its communications. Most users did not respond to the question, but a few social media platforms were recurring in the data:

- Many respondents requested that SIOP use outlets it already uses (sometimes requesting for more effective leveraging of those channels): LinkedIn, Twitter, YouTube, and even Facebook.
- The most popular suggestion was for SIOP to use Instagram, followed by Snapchat. Recommendations were specifically to post pictures and "stories" during the annual conference. However, only 1% of all respondents suggested Instagram and .5% of respondents suggested Snapchat.
- Other popular social media platforms mentioned were ResearchGate, Reddit, creating podcasts, and just using email.
- Only 1% of respondents made it a point to specifically say that SIOP needs no additional social media channels and should better leverage what already exists.

Follow Along, Join the Discussion, and Share Your Research!

No matter what channel or social site you use, you can find SIOP presence everywhere! If there is one thing we can all agree on, it's the value of sharing and connecting across I-O psychology members outside of our annual event. Not comfortable posting your own content? We know sharing content and opinions on social media can often seem daunting, stressful, and time consuming, but you don't have to start posting immediately to reap the benefits. Below are a few articles and examples of fellow I-Os who are keeping the buzz going online:

- **Top 80 I-Os to Follow on Twitter:** https://medium.com/@SurveyGuy2/80-iopsych-pros-to-follow-on-twitter-228ff16dcd2c
- **I-O Podcasts to Watch:**
    - The Official I-O Podcast: http://www.siop.org/podcasts/
    - Department 12 Podcast by Ben Butina: http://department12.com/
        - Follow @Department12pod: https://twitter.com/department12pod
- **I-O research curators tofollow:**
    - **I-O at Work -** http://www.ioatwork.com

- **SIOP Ccannels** (Follow these channels so you get great updates in your feed!)**:**
  http://www.siop.org/socialmedia/
  - **Facebook -** The Society for Industrial-Organizational Psychology https://www.face-book.com/siop.org
  - **Youtube -** SIOPoffical - https://www.youtube.com/user/SIOPofficial
  - **LinkedIn Company Page** - **LinkedIn Group** **-** The Society for Industrial-Organizational Psychology Group
  - **Twitter -** @SIOPTweets
- **YouTube examples:**
  - **Adam Grant**
    - **Example TED Talk**
  - **Re:Work Google**
- **Facebook examples:**
  - One group that appears regularly in searches:
    - https://www.facebook.com/groups/AOPP2014/
  - Academics and professors use it for classes.
  - Consider following labs/blogs that cross-post to Facebook.
- **Elevate your brand and that of the field: Read these articles on I-O branding through social media:**
  - Poeppelman & Blacksmith *TIP* article:
    http://www.siop.org/tip/jan14/513tip/513/files/114.html
  - For students: Sorenson, J., Sasso, T., & Ewles, G. (2016).
    http://www.siop.org/tip/oct16/tt.aspx
- **Join the discussion at our annual event** by completing your social media details when submitting to #SIOP18 - leave your handles/profile details so we can follow you!

We hope to see you on the SIOP social channels!

Questions about the survey or interested in understanding more about the social media survey through further analyses? Please contact Stephany Below (sbelow@siop.org) for more information.

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So You Want to Write a Book? Advice for Authors

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Writing a book is often seen as a major accomplishment for someone in academia or practice. Every author or book editor has experienced a "first time" when the undertaking is without benefit of prior similar experience. We are a group of I-O psychologists with experience in preparing a variety of books. We shared our perspectives with an audience at the 2017 SIOP confernece. Collectively, we have authored or coauthored scholarly books (Bryan, Thornton, Tippins) or textbooks (Hays-Thomas, Truxillo), edited or coedited volumes (Bryan, Hays-Thomas, Thornton, Tippins, Truxillo), and served as series editor (Tippins).

This article summarizes our collective advice to our colleagues who may be deciding whether to attempt preparation of a book. We consider four main questions:

1. How does preparing a book differ from other types of academic writing?
2. Why might someone consider preparing a textbook, scholarly book, or edited book, working alone or collaboratively?
3. What are the steps in bringing a book idea into reality? and
4. What is the typical process for preparing a book in a series like the *Professional Practice* books?

In addition, we make suggestions about writing and editing books. In this context, the word "editing" refers to the process of planning and preparing a book consisting of chapters with different authors, as opposed to the process of cleaning up a manuscript and preparing it for submission.

How Does Book Preparation Differ From Other Academic Writing?

First, books are typically more comprehensive than research journal articles or chapters. They address a topic in more depth and breadth and allow the author(s) to explore topics and integrate them with others. Journal articles are usually focused on specific research results that conform to the narrow specified policy of the journal, whereas a book allows broader integration of a freer combination of topics.

Second, journal articles are generally targeted at professional peers, but a book is more likely to be aimed at diverse audiences, perhaps even in other fields. Journal articles are usually subjected to scientifically rigorous, focused criticism from reviewers who use narrow scholarly/research/academic criteria

and typically provide specific critiques. Although book outlines may be reviewed by the publisher or an editorial board to ensure proper coverage and appropriateness for the intended audience, books must meet different criteria, including expression more accessible to the general public, marketing appeal, and lack of redundancy with other volumes. Their approach and style can be more varied.

Third, journal articles generally follow specific stylistic guidelines in terms of their organization (e.g., introduction, method, results, discussion). A typical journal article is not solicited but instead is submitted by author(s) to whatever journal seems most suitable. Some journals (e.g., *The Journal of Social Issues*) and special issues of other journals also call for articles on a specific topic and are constructed like an edited volume. In contrast, the organizational structure of books is more varied and generally determined by the author(s). In edited books, editors may invite authors to prepare chapters by issuing a call or by contacting specific individuals. The content and organization of chapters are generally developed by authors in consultation with the editor(s). Chapter authors may be asked to address a particular aspect of the larger subject, and any integration is usually provided by editor(s). The structure of individual chapters is usually determined by the chapter author(s) and is less prescribed and specific than the organization of a journal article.

Why Consider Doing a Textbook, Scholarly Book, or Edited Book? Should You Work Alone or Collaboratively?

Motivations for this type of writing may be extrinsic or intrinsic. In most cases, authors should not expect significant financial rewards for publication of academic books. However, authors of very widely adopted basic textbooks or books with popular appeal may earn significant royalties. Royalties are generally a percentage of sales (e.g., 10%; although this can vary and be negotiated with the publisher) and are negotiated at the time the book is contracted. The royalties for books in a series (e.g., SIOP's Professional Practice Series or Frontiers Series) may already be established for the entire series. Faculty should consult their own institution's policies and culture to determine whether books are important for promotion or tenure. Many institutions place less emphasis on books (especially textbooks) than on grants awarded and research articles published. In general, book writing should not be undertaken by pretenure faculty. This is because peer-reviewed articles (and chapters) are more important for tenure at most institutions, combined with the large time commitment involved in book preparation and the length of time between writing and publication. Authors employed in private industry, government, or consulting firms usually face different expectations and reward systems and should generally expect little recognition from the organization for their writing efforts. They should also determine if there are limitations on what is published. Still, for experienced professionals, book authorship is generally important in leading to recognition in the profession, in related fields, and to the general public.

Considering the relatively limited extrinsic rewards for writing a book, the potential author should have strong intrinsic motivations for undertaking the daunting task of writing a book. Primary motivations should be enjoyment of scholarship and writing, and the need to inform an audience on a particular topic. There may be no recent book of a particular type, and a new book may fill an important niche in scholarship or practice. (If another book exists, first consider what your new book might contribute that others do not.) In preparing a book, the author or editor has the opportunity to develop content in the field, translate research to nonexperts, and explore conceptual connections within and across diverse fields. One can contribute new theory, models, best practices, or insights. Furthermore, some enjoy writing and find it relatively easy to do. Many senior professionals feel it is their obligation to contribute to the field by authoring or editing books.

Another question is whether it is best to work alone or within an author team. Working alone provides a single "voice" and style, and allows the author to develop ideas as she or he wishes. However, working closely with coauthors/editors or chapter authors on a book can be rewarding and the resulting product may be improved as a result. Coauthors/editors can generate synergy, stimulate ideas, contribute

unique skills, check each others' work, and verify adherence to the original proposal and style, but collaborators' work must also be combined into a coherent and consistent product. Collaborators can provide support and feedback, share the workload, and motivate each other to stay on schedule and finish the project earlier. In addition, consider your coauthors in terms of working style and what each team member brings to the project. These are significant points to consider at the outset, as aspiring authors should note that the writing task itself can be a lonely process, and having a team helps a lot!

What Are the Steps in Bringing a Book Idea to Reality?

There are number of key steps to bring a book to reality. First, we suggest you carefully establish the need for the book you envision, and think about the niche it will fill. Are there similar books? How is your idea different? Who is the intended audience? How marketable is the book? Books most often begin with the aspiring author's or editor's idea but in some cases may be solicited by editorial boards or publishers. Second, think seriously and soberly about whether your schedule permits the undertaking of such a large project. It will always take longer than you expect! It is important to clearly articulate and organize each step needed to bring the book to fruition (e.g., first draft of each chapter; review period; revisions; proofing and typesetting) and have administrative or clerical support prearranged if possible.

Third, consider working with a coauthor or coeditor. Be sure this person is someone with whom you can work and who has a reputation for following through on commitments in a timely way. Consider what each of you would bring to the project and how each of your skills might complement the others'. Sharing the task may result in faster completion and even a better product as you critique and supplement each other's work.

Fourth, it is important to identify the appropriate publisher who is the best fit for your topic. Identify publishers who develop books that are similar in area and type. Talk to colleagues who have published similar types of books or books on similar topics. Ask them to recommend publishers and give you advice about negotiating royalties, contracting, and other topics. Develop a relationship with appropriate publisher(s). Speak to publishers' representatives at professional meetings or contact them by email or phone to discuss your idea.

Fifth, develop your proposal. Publishers generally have a format for information required for a proposal that can be obtained from the publisher's representative or at their website. You might also be able to obtain samples of other successful proposals. The proposal will typically ask you to address the proposed content and organization, length, market, other competitive products, and the ways in which your idea is different from what's already out there. You may also be asked to submit a table of contents and a few sample chapters. These may be sent out for review by other scholars who know the field for feedback.

Next, if a publisher likes your idea and a contract is proposed, read it carefully and be aware that most of the terms of that contract are negotiable (unless the book is part of a series). This includes such things as royalties, who pays for the index (i.e., is cost of the index deducted from your royalties or paid by the publisher?). The publisher may wish to have an online version of the book, and this often imposes special considerations. Be sure you understand what type of indexing will be done (i.e., author, subject, combined, or separate) and who will do the indexing. Good books are sometimes diminished by a poor index. More than one editor may be involved in production of a book as staff turn over and as the book progresses through various stages from proposal, reviews, revisions, style editing, and production. This staff turnover means that you should keep good records regarding agreements you have made with the publisher throughout the proposal and contractual process (save those emails!), and also be flexible.

Once you have negotiated and executed a contract with the publisher, your publisher will probably ask you to submit a set of chapters by a certain date to be sent out for review. Deliver chapters that are well written, polished, carefully referenced, and timely. Evaluate the feedback you receive and modify your ideas accordingly. It will probably lead to a better book. The publisher is often very helpful in deciding which feedback is most important.

Finally, carefully review the book at its various stages of production, including the indexing and formatting. Note that the production of the book is often not done in house, and you cannot assume that your vision of the final look of the book will be what you and the publisher originally negotiated. If something seems wrong, say so.

What Is a Typical Process for a Book in a Book Series?

In some cases a book may be proposed as part of a series (e.g., Professional Practice). The process for selecting topics, volume editors, and chapters may vary with the series. In the case of the Professional Practice series (currently edited by **Nancy T. Tippins**), in past years the series board chose topics and identified an editor who was asked to draw up a more complete outline of the book and possible chapter authors. The Professional Practice series has recently moved to a new publisher and will now consider ideas that are proposed as well as formats other than edited volumes of chapters by several authors.

The outline is sent first to the editorial board for review, then to the publisher. Both may make suggestions to the book outline. If approved, a contract with deadlines is developed. In the past, rejections by the publisher were often related to how well the book was expected to sell. With the new publisher, rejections are no longer based on sales potential. The publisher will consider projects that are timely, important to the practice of I-O psychology, or fit a niche market.

Once the proposal is approved, the book editor contacts authors and manages the completion of the proposed volume. The series editor checks in periodically and makes sure things are running smoothly and according to schedule.

General Suggestions for Writing

Goal setting works! Set aside regular and frequent chunks of time for writing. It is difficult to disengage and reengage with much time in between. Some writers pick a certain time each day (e.g., early morning) to focus on writing before the distractions of the day begin. Some set a goal of a number of pages or a section to be completed in a sitting. One author recommended writing the first sentence of the next section before stopping as a guide to what comes next. Some authors take "vacations" in a different location and allocate most of their time to writing undistracted. Plan for about three times the amount of time you expect to need.

Record details of citations and references (or construct the reference list) as you write. Electronic references may change, and government documents may be updated between your draft and final manuscript. These must be rechecked in revision and before final submission, and may require alteration of your text as well as references.

Book contracts usually specify page (or word) limits, and you may find it difficult to stay within those limits. If the initial version is very much over the limit, allow time to shorten it. Shortening involves matching references to text again and may affect continuity.

Follow the publisher's style manual. This may not be APA style or another familiar to you. Alternate forms of wording (e.g., acronyms, shortened titles of organizations, different spellings) and formats (e.g.,

paragraphing, indentation, spacing) may be used. From the start, focus on clarity and consistency throughout each and all chapters. Ask knowledgeable colleagues or others for whom you are writing (e.g., students) to read chapter drafts as you go to check for clarity, accuracy, level, and consistency of language. When permissions are needed (e.g., for copyrighted work, quotations over a certain length), get these early and save for any later editions. Sometimes it is difficult to determine who owns a copyright. In some cases, payment is required to use copyrighted material. If using screen shots or other art work, assure high quality from the beginning because it may degrade with reproduction.

General Suggestions for Editing Books

When preparing an edited book of chapters prepared by others, choose chapter authors carefully based on their expertise and reputation for writing well and meeting deadlines. This may be difficult because in some cases there are no writing samples. Some editors decline to use again those authors who in the past have submitted work that was poorly written or very late. Set up and enforce a clear time schedule for authors. The editor is responsible for producing the volume but cannot do so without the authors' contributions. Remember that authors are typically working on multiple projects, so be sure to send multiple "friendly reminders" about upcoming deadlines.

Allow time to send individual chapters out to colleagues for review, especially if you do not have in-depth knowledge about the topics of the chapters. This can help verify that the chapters are original works and contain timely and accurate information about topics. The first round of editing may aim at adhering to length limitations, identifying sections that are confusing or redundant, and improving how chapters fit together. Later in the process, editing may become more directive and specific, and identify things that are unclear, contradictory, or involve typos and grammar. When working with chapter authors (especially authors who generally write in other languages), plan for considerable editing of chapters for expression as well as content.

Participation is often especially difficult for those in practice because no time during the work day is allocated to writing, many must account for billable hours, and (unlike most academics) they may not be expected to write and publish or be rewarded for doing so. However, once practitioners agree to contribute, most are good at meeting timelines, and many write well because they often write for executive audiences. For those in practice, reviews or approvals internal to their companies may be necessary and add time to the process. Illustrations in particular may be proprietary.

Writing or editing a book can be an interesting and rewarding process, and the result may be a real contribution to the field. Book writing and editing are major commitments and are best undertaken with planning, commitment, and understanding of the process. The authors of this article have all derived satisfaction from this work. We hope that potential authors and editors will find our suggestions helpful.

Table 1
Checklist for Bringing a Book to Fruition

1. Consider the need for the book you envision and think about the niche it will fill.
2. Think seriously about whether your schedule permits the undertaking of such a large project; plan out, realistically, the steps required to bring the project to fruition.
3. Consider whether to work with coauthors or coeditors.
4. Identify the appropriate publisher.
5. Develop your book proposal to submit to the publisher.
6. Carefully negotiate your contract with the publisher, and document agreements you and the publisher have made along the way.
7. Submit your chapters in good shape on the agreed-upon schedule with the publisher and incorporate feedback from reviewers.
8. Carefully monitor and review the book at the various stages of production.

These Are Tough Times for Us Optimists

Milton D. Hakel, PhD

INTRODUCTORY NOTE: Here is the question that generated the brief essay below: "In your view, what is the value of psychological science and practice in the 21st Century?"

The question came from the editors of a volume commemorating the 75th anniversary of the International Council of Psychologists (ICP). ICP is committed to furthering world peace, promoting human rights, and collaborating with mental health professionals and social scientists globally.

Resources for International Psychology: 75 Years of the International Council of Psychologists will be published in December 2017. Twenty essays addressing the future, plus more essays addressing the past and present of international psychology—organizations, teaching, research, consulting, service, study abroad, teaching abroad, funding, and so on—will appear in it. Check it out at http://www.icpweb.org/publications. My essay appears in the Foundation Spotlight in this issue of *TIP* because SIOP and ICP members have many similar aims, celebrating ICP's 75 years reminds us that psychological science is a global pursuit, and the fastest growing segment of SIOP's professional membership is international.

For me, today's world looks too much like the 1930s, with economic distress, rampant nationalism and ethnocentrism, and threats of economic and military conflict. Oh, yes, don't forget about climate change, migration, rising sea levels, and increasing automation. Then too, consider instant global communication, coupled with high cynicism about political and civic affairs, all compounded by "universal omniscience": the belief that every person's opinion is as good as anyone else's. Hmmm, maybe it's worse than the 1930s. Tough times indeed. What's a psychologist to do?

Well, first off, keep this in mind: *All evils are caused by insufficient knowledge.*

David Deutsch presents this statement as the principle of optimism. He writes:

> Optimism is, in the first instance, a way of explaining failure, not prophesying success. It says that there is no fundamental barrier, no law of nature or supernatural decree, preventing progress. Whenever we try to improve things and fail, it is not because the spiteful (or unfathomably benevolent) gods are thwarting us, or punishing us for trying, or because we have reached a limit on the capacity of reason to make improvements, or because it is best that we fail, but always because we did not know enough, in time. (David Deutsch, *The Beginning of Infinity: Explanations That Transform the World*, 2011, p. 212)

Next: *Lighten up and look at the big picture*.

Examine current world-wide levels of long and healthy living, educational attainment, and standards of living, as documented in the United Nations *Human Development Reports* (http://hdr.undp.org/en/content/human-development-index-hdi). Or better yet, see the trends illustrated in Hans Rosling's captivating data-visualization *The Best Stats You've Ever Seen* (https://www.ted.com/talks/hans_rosling_shows_the_best_stats_you_ve_ever_seen/transcript?language=en).

Much remains to be done –the United Nations' Sustainable Development Goals set out 17 challenges to be met by 2030. See them at http://www.undp.org/content/undp/en/home/sustainable-development-goals.html. These are soluble problems, and research will be needed to solve them. That said, the state of the world has never been better.

And last: *Keep researching for better explanations*.

I use the word "researching" because that is what we do to explain and improve the world. Psychologists have been refining and expanding reliable and usable knowledge for well over a century. Science in general and psychological science in particular claim neither infallibility nor finality. Yesterday's practices and theories have been supplanted by today's, and they will be supplanted by tomorrow's. We have a long way to go.

Beware of universal omniscience, both as proclaimed in public media (e.g., fake news) and as asserted by expert authorities—all opinions are NOT equally good. Don't let postmodernists and deconstructionists get you down with claims that all ideas, including scientific theories, are conjectures, nothing more than stories. David Deutsch again:

> Mixing extreme cultural relativism with other forms of anti-realism, [postmodernism] regards objective truth and falsity, as well as reality and knowledge of reality, as mere conventional forms of words that stand for an idea's being endorsed by a designated group of people such as an elite or consensus, or by a fashion or other arbitrary authority. (p. 314)

Evidence and rationality provide the basis for better opinions, both personal and scientific.   So let's get on with improving psychological science.

One sure way to improve applied psychological science is to contribute your time, talent, and treasure to the SIOP Foundation. Your calls and questions to the SIOP Foundation are always welcome. Join us in building any of the endowments. Contribute or make a pledge at http://www.siop.org/foundation/donate.aspx.

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Reports

Members in the Media

Barbara Ruland
Communications Specialist

This edition of Members in the Media, with more than 70 individual media citations, doesn't capture the whole picture of SIOP members' growing presence in the popular press.

Nonetheless, it presents members working in a wide range of industries and addressing numerous topic areas relevant to the profession, the clients who rely on I-O expertise, and the general public.

Some members are creating media content directly, whereas others are included in media coverage. Read on to learn about the media outlets turning to your colleagues in I-O psychology for expert, scientifically based insights into people at work.

Administrative Office Media Placements

SIOP's Administrative Office staff connected five journalists with members this quarter. The journalists represented the *Chicago Tribune, CNN.com, Bloomburg Business,* and two industry publications, *Industrial Safety & Hygiene* and the National Safety Council's *Safety + Health*. Several of the articles are still pending, but the *Chicago Tribune* update on [trends in corporate team building](#), including perspectives by **Eduardo Salas** and **Wendy Bedwell**, was also picked up by a paper in Oregon, the [*Register Guard*](#)*,* and the [*Arizona Daily Sun*](#)*.* **Seth Kaplan** contributed to the CNN.com story on the relationship between [workplace stress and health](#), sparked by the recent release of two studies.

In a related note, Tracy Vanneman, SIOP's Partnerships and Programs Manager, penned an article for the Ohio Society of Association Executives on ["Annual Meeting Staff Survival Tips"](#) that might resonate with many who attended the annual conference in Orlando.

I-O Psychology's Widening Influence

Concepts and insights created by industrial-organizational psychologists percolate through many areas of psychology and their acceptance as common knowledge or standard operating practice are hallmarks of the discipline's widening influence. An investment banker quoted extensively in a [report on mergers and acquisitions](#) for *Finance & Commerce* say that more companies are using I-Os to examine cultural fit before making acquisitions.

I-O's growing influence is clearly facilitated by SIOP members contributing to conversations in business and popular media on a variety of topics. Perhaps no other member is as prolific in this regard as **Adam Grant**. The online daily news and information source OZY introduced an [interview](#) with him by saying, "Grant's organizational theories have caused countless individuals to reframe their professional lives." However, there are several other SIOP members also making significant impacts. Some included in this [Top 100 HR Influencers List](#) on engagedly.com are **Allan Church, Robert Hogan, Alan Colquitt,** and **Evan Sinar**.

There were more than 40 mentions of SIOP members discussing individual areas of I-O inquiry this quarter, covering everything from "analytics" to "work and family."

Michael Woodward and **Sheri Feinzig** discussed the importance of using data in HR and her new book on workforce analytics for SHRM's *HR Magazine.*

Coaching, leadership, training, and talent management/development are of perennial interest and received a fair amount of the coverage.
Lois Tamir and **Laura Finfer** wrote a piece for the *Harvard Business Review* on age based responses to executive coaching. This research was also covered by Bloomburg.com and the *Charleston Gazette-Mail.* The business partners also penned a leadership column for *Training Industry* about when a prescriptive approach to executive coaching is appropriate.

Ben Dattner collaborated on a *Harvard Business Review* article about how executive coaches can help companies respond to executive job–fit mismatches.

Adam Grant's thoughts on the leadership qualities of Elon Musk and Ray Dalio were covered by Yahoo! Finance, and in two articles on CNBC.com, here and here.

Mary Ann Bucklan contributed a piece to the Call Center Times, an online resource for the call center industry on the competencies and personal attributes of successful call center team leaders.

Tomas Chamorro Premuzic contributed a piece to *Forbes* on how companies can identify and develop internal candidates to fill their talent needs. **Travis Bradberry** shared thoughts about emotional intelligence with *Talent Development*. **Karen Grabow** was highlighted for her presentation on talent management in the *Agrinews* newsletter.

Sayeed Islam penned a post for ADP's Spark blog on the importance of an organization's brand to recruiting.

Alison Eyring chose a compelling metaphor comparing learning by experience to sand in an oyster to open her article for SmartBrief that was also picked up by agprofessional.com. **Lynda Zugec** offered advice in an article about a different aspect of training: potential US federal financing for employee training. Read about it at *Human Resource Executive*.

Small business owners play many roles, including HR manager, and **Amy Cooper-Hakim** *contributed to a blog post for small business owners on hobbies that develop management skills.*

Michael Woodward conducted an interview with **David Smith** *on learning agility, a requirement for thriving in a VUCA world, for Psychology Today.*

Amy DuVernet contributed to an article for HR Magazine on the related topic of creating a learning culture.

SIOP members were cited on several aspects of organizational culture. **Jaclyn Jensen** *discussed Uber's "bro culture" for Business News Network, and* **Nikki Blacksmith** *and* **Meredith Coats** *discuss how leaders set the tone for organizational culture in a story for Bustle.*

The topics of recruiting, hiring, and employee motivation received coverage in a variety of media outlets. **Jennie Hollman** wrote a piece busting myths about millennials in relation to hiring and retention for *Independent Agent,* an insurance industry publication.

Michael Moon discussed the use of people analytics and process methodology to improve new hire retention for [Business 2 Community](). [Adam Grant]() and **Rich Tonowski** were quoted in two different articles about unfair hiring practices.

Lewis Garrad and Tomas Chamorro-Premuzic illuminated the relationship between companies' financial performance and their ability to create meaning for employees in a column for the *Harvard Business Review* that was also picked up by an insurance industry publication, *Carrier Management*.

Chamorro-Premuzic also contributed an ironic piece to *[Management Today]()*, in which he advocated for creating a new management role: the chief misery officer.

Diversity and equality of opportunity are top of mind for many right now. A recent Google search on the word yielded just under 400 million hits, with diversity in the workplace supplying 66 million of them.

Alex Lindsey, Eden King, Ashley Membere, and Ho Kwan Cheung collaborated on a report *for Harvard Business Review* about research on [effective diversity training](). This article was also picked up [by True Viral News.]()

Lisa Finkelstein and **Courtney Thomas** wrote a guest blog for *Psychology Today* about [age stereotyping]() younger workers.

Amy Cooper Hakim commented on the public gender feud between Serena Williams and John McEnroe on the [Moneyish blog]().

Engineer James Damore's infamous memo on diversity sparked comment from SIOP members including **Tacy Byham**, who discussed the corporate benefits of gender diversity in an *[Entrepreneur]()* article on why gender equality is an "everyone issue." Adam Grant's comments on the subject were picked up by [Yahoo! Finance](), [Blasting News,]() and [Today's Viral News]().

[Benefit News]() and *[Employee Benefit Advisor]()* reported on work done by **Lindsay Sears** and the Work Institute revealing the causes and costs of employee turnover.

That study showed work–life balance accounted for 12% of turnover. Lynda Zugec discussed the subject of [parental leave]() with an information and advice blog for fathers, and SIOP's Clif Boutelle penned two articles for *Workforce* ([here]() and [here]()), featuring **Wendy Casper** and **Jennifer Deal**, on equitable treatment for workers who do not have children.

I-O Psychology in the Wider World

The science of I-O psychology can provide valuable insights in many areas of life, including parenting. Adam Grant's advice for raising resilient kids was featured on [Red Tricycle](), and [boing boing](). More generalized advice about resilience, drawn from his latest book with Sheryl Sandberg was featured on the [mindbodygreen]() blog, [True Viral News](), the *[Eugene Oregon Register Guard]()* and the *[Texarkana Gazette]().* Relatedly, SIOP member **Janice Tollini** wrote about [finding gratitude]() for her local paper.

[Business Insider]() and a *[Psychology Today]()* blog post discussed **Sabine Sonnentag's** study of the productivity and creativity benefits of time off. The information is also referenced on [healthemedicinet.com]().

Ron Riggio contributed to a widely shared *Business Insider* article about [reading body language]().

I-O psychology research can also help individual workers and job seekers, as well as the organizations that employ them.

The *Seattle Post Intelligencer* picked up an article about research presented by **Cynthia Hedricks** and SkillSurvey at the 2017 SIOP Conference on checking job applicant references that presents insights useful for both hiring managers and prospective employees.

Tomas Chamorro-Premuzic gave a nod to Ben Dattner and his book *Credit and Blame at Work* in the Harvard Business Review article with advice on "How to Deal with a Boss Who Stresses You Out."

Adam Grant suggested job seekers ask their interviewers to tell them a story to learn about company culture in an article for Yahoo! Finance. A *Quartz* magazine feature expanded on that theme. He also wrote an *Esquire* piece on film maker Christopher Nolan on focus, procrastination, passion/motivation, and creativity.

Paul Babiak, coauthor of *Snakes In Suits: When Psychopaths Go to Work* got a nod in a Huffington Post article about two films at the 2017 San Francisco Silent Film Festival and another in an article about Donald Trump on alternet.org.

I-O Psychology as a Career

Continuing media coverage and wider understanding of the work of I-O psychologists translates into more career opportunities in the field and I-O psychology is receiving recognition as a good career choice in many quarters.

Most recently, CNBC and *USA Today* reported that I-O psychologists and airline pilots are leading the country in wage growth. The overall US annual wage growth rate of 2.5% is up overall about 0.5% from 2011-2014 but was at 3% before the recession

In May, the *Houston Chronicle* reported on GI Jobs' annual list of Hot Degrees for Veterans, ™ which listed I-O psychology as "on the rise" in recognition of its growing year over year demand between 2014–2016.

Entrepreneur India considers I-O a trending opportunity for those studying psychology, and *Business Insider* ranks it number 10 on its list of the highest paying jobs available for those with masters degrees.

Local Coverage

SIOP members are frequently mentioned in local media. Here are some mentions found through the SIOP media monitoring service, Google Alerts, and direct notifications by members.

Anne Herman, cited in a fascinating piece for the Omaha World Herald, is helping the United Way of the Midlands navigate the changing landscape of charitable giving.

Steven Jex, from the University of Central Florida, and members of the Bowling Green State University Psychology Department were featured in a BG Independent Media article for their study of aging workers.

In his regular column for the New Hampshire *Union Leader*, **Paul Baard** covered topics including business etiquette, employee suggestions, workplace bullies, and employee compensation and evaluations.

Dave Baker of Palmetto Leadership in Anderson, South Carolina was profiled in the local business publication, *Metro Columbia CEO.*

Suman Kalra was quoted in a piece for AM New York about her unusual pastime, body painting.

In closing, here's an interesting note from *Scientific American*. Member **Michael Mumford** contributed a cautionary note about self-selection in surveys biasing results to a piece about scientists' self-perceptions: "Scientists Think They're More Rational Than Other People."

Send your media notices to Barbara Ruland at the SIOP Administrative Office for sharing on social media and in this column.

SIOP 2018 Chicago
33rd Annual Conference: April 19-21, 2018
Preconference Workshops April 18, 2018

Tracy Kantrowitz	**Chu-Hsiang (Daisy) Chang**
Program Chair, SIOP 2018	**Conference Chair, SIOP 2018**
CEB Gartner	**Michigan State University**

SIOP 2018 will feature the "Team SIOP" theme by highlighting collaborations, demonstrating impact through partnerships, and featuring multidisciplinary approaches to advance our science and practice, with several new features and an outstanding lineup of team-focused sessions! Planning for this 33rd Annual Conference in Chicago is well underway, so mark your calendars now. Don't miss this chance to join the "team"!

Submissions

A sincere thank you to everyone who submitted proposals in response to the Call for Proposals drafted by **Rob Stilson** and his CFP committee! The results of the peer reviews will be e-mailed to submitters in early December.

Concurrent Sessions: New Concepts, More Alternative Sessions

As always, the member-submitted, peer-reviewed sessions will be at the heart of our conference. Over the course of 3 days, the program will feature hundreds of highly rated sessions featuring I-O psychology research, practice, theory, and teaching-oriented content. Presentations will use a variety of engaging formats including symposia, roundtables, panel discussions, posters, debates, master tutorials, and this year more *alternative session type* format for hands-on learning sessions, research incubators, open space, mashups, fish bowl, and other nontraditional presentation styles. Introduced in 2017, sessions presenting **reproducible research** will be aimed at accelerating our science and practice by educating our members about new research and analysis techniques through the sharing of data, code, and syntax. **New for 2018,** sessions that feature multidisciplinary work will highlight science and practice for a smarter workforce through collaborations with other disciplines. In addition, we will have insightful presentations from SIOP award winners, several Executive Board-sponsored sessions that highlight the "business of SIOP," a team-focused Thursday Theme Track, Friday Seminars that will educate attendees on an array of timely topics, Communities for Interest for connecting like-minded researchers and practitioners, and a special event track that you won't want to miss!

Thursday Theme Track

The Program Committee is pleased to offer, **"**Putting the 'I' (and 'O') in Teams,**"** an interactive theme track that highlights boundary-breaking examples of I-O impact within and across multifaceted teams. For those unfamiliar, the Theme Track is effectively a conference within the broader conference—a full day of programming designed to bring President **Fred Oswald's** vision of **Team SIOP** to life. The Theme Track will feature extraordinary and unconventional ways I-O research and practice fuels inter-disciplinary science, innovation, and social change. Chair **Tracey Rizzuto** and her committee are assembling an exceptional lineup of presenters, and call for an engaged SIOP audience to debate, create, learn from, and playfully "compete" in our dynamic interactive sessions. The sessions focus on:

- *Lost & Found in Translation: Translating "I-O-Speak" to Non-I-Os in Multidisciplinary Research and Practice Teams:* This session will highlight effective models of I-Os who work in multidisciplinary settings and offer tips and skills training on how to communicate our professional strengths and lend I-O science and practice contributions to endeavors outside of the field.
- *I^3 – I-O Igniting Innovation:* This session is focused on ground-breaking innovations and patents that were catalyzed by I-O scientists, practitioners and consultant. It will feature one of Chicago's recently recognized "most innovative" organizations and illustrate how success is amplified when I-O is part of the team.
- *How-To Guide to Make Public-Private Partnerships Work (Hands-on/Action Workshop)*: This session will offer examples, legal guidance, templates, and models for navigating sticky public–private issues that emerge when engaging I-O science and practice with project teams that span multiple sectors. The goal is to enhance the capacity of I-O to serve as effective team players.
- *TEAM SIOP Gameshow:* Attention all board game and game show fans! This playful, interactive session will feature I-O "celebrities" and enthusiastic audience members as contestants in a fun-filled battle of wills and IO prowess. The winner will be named Team SIOP Theme Track Champ!

The Theme Track promises to provide a day of engaging, provocative, and inspiring sessions that are interactive—bring your laptops, cell phone and brilliant minds! The sessions are designed to provoke discussion, the exchange of ideas, and playful debate. These sessions will be scheduled back-to-back in the same room. We invite you to stay all day or attend only the sessions of most interest to you.

Special Events

This year we are excited to feature several special events throughout the conference, architected by Special Sessions chair **Levi Nieminen** and his committee.

First, we are very excited to host a second iteration of *Shaken & Stirred*, inspired by the wildly popular 20x2 format at Austin's SXSW Interactive Festival. This event was piloted at SIOP 2017 to strong attendance and even stronger enthusiasm, featuring 15 dynamic speakers who left attendees inspired and provoked in response to the big question, "What if…" At SIOP 2018, we will seek to build on the momentum from the first installation and attract dynamic and boundary-spanning thought leaders to offer us their forward-looking insights in response to a new question that will leave plenty of room for ideas to take flight.

Second, we feel it important to continue the recent dialogue and debate that was sparked by the 2017 *TIP* article, "Has Industrial-Organizational Psychology Lost its Way?" by **Deniz Ones** and colleagues. To offer an innovative spin on the traditional debate format, we plan to host a *Tweetstorm Virtual Debate* with two teams of scientists and practitioners who will debate the topic of I-O identity with live input from the audience via Twitter streams that will be displayed in real-time via large projection screens. Pro and con #hashtags will help bring

order as we consider our way as a field. We hope this format will open up the debate to everyone, encouraging attendees' participation and creating the opportunity for truth and advancement.

As I-O psychology increasingly integrates apps, machine learning, virtual reality, and every other technology you can imagine into its product offerings, it's clear that driving innovation through the use of technology is an increasingly important areas I-Os can contribute. With this in mind, our third session focuses on Driving Innovation in I-O Tools. It will feature I-Os working at the cutting edge of innovation who will discuss their journey toward innovation and will share examples of innovative tools that are changing the user experience.

The rise of big data has spurred some I-Os to gain new analysis skills and explore alternative methods of maximizing prediction in the types of data sets we work with. A new special event will feature education on big data approaches and will pit "teams" of analysts in a Kaggle style competition who will use a variety of methods to see which team "wins" on prediction. Learn some new techniques and find out who wins!

Friday Seminars

Friday Seminars offer a unique educational opportunity within the main part of the conference. These 3-hour sessions are the only extended-length sessions on the schedule and take place on Friday. The sessions are intended to provide a rich immersion experience for attendees on timely, cutting-edge content areas presented by true content experts. Each session is shaped around learning objectives in order to ensure that professional developmental goals are met. Please note that Friday Seminars require advance registration and an additional fee. This year's Friday Seminars committee, led by **Richard Chambers,** will offer the following six sessions:

- *A Crash-Course on R!*
- *Fostering Effective Change: Not All Who Wander Are Innovative*
- *High Tech Assessments*
- *Wearable Technology*
- *Communicating Insights and Visualizing Data*
- *Social Networking Analysis*

Featured Posters

We will once again showcase the top 20 rated posters at an evening all-conference reception. Come view some of the best submissions to the conference while enjoying drinks in a relaxed atmosphere with the presenters. If you've never been to this event, make 2018 the year you check it out!

Communities of Interest

Interested in an "open space" SIOP format that is attendee driven, informal, and focused on a topic of particular interest to you? The Communities of Interest allow you to meet new people, catch up with colleagues, learn about new advances, discuss ideas, have a provocative discussion, and play a part in driving breakthrough research and practice ideas on a hot topic at the forefront of I-O psychology. These sessions are designed to enhance existing communities and create new ones around common themes or interests. They have no chair, presenters, discussant, or even slides. Instead, they are discussions shaped on the basis of the audience and informally moderated by one or two facilitators with insights on a topic of interest. These are great sessions to attend if you would like to meet potential collaborators, generate ideas, have stimulating conversations, meet some new friends with common interests, or expand your network to include other like-minded SIOP members. Chair **Dev Dalal** and the rest of the COI Committee

are lining up some great sessions and facilitators for this year's conference, covering a wide range of topic areas:

- Fostering Science–Practice Collaboration: Employee Well-Being
- Communicating I-O Psychology to Society: Taking a Seat at the Decision Making Table
- Technology in Assessment: Moving From Reactive to Proactive
- Communicating with Organizational Leaders: Selling Our Intervention
- Recruitment in Today's Workplace: Current Practices and Research Needs
- Fostering Science–Practice Collaboration: Recruitment and Candidate Experience
- Taking Advantage of Breaks at Work: Easier Said Than Done?
- Collaborating Across Scientific Disciplines: Making I-O More Cross-Disciplinary
- Let's Talk About Dirty Data! Grappling With Issues of Real-World Data
- Alternative Work Arrangements: Agile Project Management Methods Are Here!
- Mindfulness at Work: Opportunities and Challenges for Research and Practice
- Affect and Emotions in the Workplace: Current Findings and Practical Implications
- I-O and Job Automation: Implications for the Future of Work

Continuing Education Credits

The annual conference offers many opportunities for attendees to earn continuing education credits, whether for psychology licensure, HR certifications, or other purposes. Information about the many ways to earn CE credit at the SIOP annual conference can be found at http://www.siop.org/ce and will be continually updated as more information becomes available.

Closing Plenary and Reception

Your Conference Committee is in the process of finalizing our closing plenary speaker. We will follow the closing plenary with our closing reception. The conference committee invites you to join us on Saturday evening at a themed closing reception in one of the largest hotel ballrooms in the midwest that will be filled with music, dance, and delicious food.

The Conference Hotel

The Sheraton Grand Chicago will provide the perfect setting for our conference. Overlooking the Chicago River, the hotel is in the heart of the Windy City. Sheraton is within walking distance from Chicago land-marks such as Millennium Park and Navy Pier, and endless dining options along the Magnificent Mile. Please see the SIOP Web page for details on booking your room and taking full advantage of all the SIOP conference has to offer.

There is much anticipation for SIOP 2018. We hope we've sparked your excitement the conference. We can't wait to see you there!

SIOP 2018 10 Great Preconference Workshops
Plus an All-New Individual Leadership Assessment Course!

Gavan O'Shea & Rob Silzer

Save the date! **Wednesday, April 18, 2018**, is the day that the SIOP preconference workshops will be held at the Sheraton Grand Chicago. Gain hands-on experience with cutting-edge I-O topics from the field's leading experts, network with your colleagues, and socialize at our premier evening reception! The Workshop Committee surveyed recent workshop attendees to identify their pressing professional development needs and through that process identified a diverse selection of innovative and timely topics to offer this year—as well as a spectacular set of experts to lead these workshops. We'll also be offering a flexible half-day attendance option again this year.

The lineup of our stellar workshops includes:

- **Storytelling With Impact: Mastering the Practical Science of Influential Communication**. Amy Grubb, Federal Bureau of Investigation (FBI); Evan Sinar, DDI
- **Glimpses of Personality Everywhere: Looking Beyond Self-Report Assessments**. Eric Heggestad, University of North Carolina Charlotte; Lynn McFarland, University of South Carolina; Maynard Goff, Korn Ferry Institute
- **Beyond Evaluation Levels: Building Value Using Learning and Development Data**. Kurt Kraiger, Colorado State University; Eric Surface, ALPS Solutions
- **How to Use Advanced Technologies for Employee Selection (and Feel Good About It!)**. Charles Handler, Rocket-Hire LLC; Shawn Bergman, Appalachian State University; Ben Taylor, Ziff.ai/HireVue
- **Successfully Transitioning High-Potential Employees to First-Time Managers**. Bill Gentry, Independent Consultant; Cindy McCauley, Center for Creative Leadership (CCL)
- **Modern Analytics for Data Big and Small**. Dan Putka, HumRRO; Richard Landers, Old Dominion University
- **Could You Pass Comps in 2018? Research Practitioners Need to Know About**. Ann Marie Ryan, Michigan State University; Charlotte Powers, Johnson & Johnson
- **How to Put the Manager Back in Talent Management**. Erica Desrosiers, Johnson & Johnson; Sarah Evans, Walmart; Ken Oehler, Aon
- **Leadership Development Programs: Current State and State of the Art**. Jeff McHenry, Rainier Leadership Solutions; Allan Church, PepsiCo
- **The Changing Landscape of Employee Surveys: Emerging Solutions to Recurring Challenges**. Bill Macey, CultureFactors, Inc., Will Shepherd, The Wendy's Corporation

New Individual Leadership Assessment Course

The Workshop Committee in close collaboration with the Professional Practice Committee is offering a new professional development course on **individual leadership assessment** at the 2018 Chicago SIOP conference.

This is a pilot effort that, based on interest and support, may lead to additional modules being offered.

- **Leadership Assessment Process and Development. Course Module 1** (half day, am only). Provide an overview of leadership assessment including identifying relevant job dimensions

and competencies, designing a leadership assessment process, setting and managing the assessment process, and ensuring participant engagement.
Leaders – Rob Silzer, Sandra Davis, Vicki Vandaveer

- **Leadership Assessment Interviewing. Course Module 2** (half day, pm only). Provide a review of critical assessor skills including conducting effective leadership assessment interviews, and learning advanced interviewing skills.
Leaders -- Rob Silzer, John Fulkerson, Andrea Hunt

This course is designed for SIOP members who are eligible for psychologist licensing, because individual psychological assessment falls under most state licensing regulations. Further information about this course will be provided in forthcoming SIOP announcements before registration opens. Any questions should be directed to Rob Silzer (robsilzer@prodigy.net).

- Develop your individual leadership assessment skills and expertise.
- Learn how to conduct assessments from leading assessment experts
- Improve your skills in using assessment data to accurately predict potential.
- Increase your awareness of best practices in leadership assessment.

Please look for more detailed descriptions of the workshops and the new individual leadership assessment course in future *TIP* issues, the preconference announcement, and on the SIOP website when conference registration opens!

The 2017–2018 Workshop Committee consists of:

Gavan O'Shea, HumRRO (Committee Chair)
Ramzi Baydoun, Abbott Labs
Melissa Harrell, Google
Jaron Holmes, U.S. Office of Personnel Management (OPM)
Megan Leasher, Macy's, Inc.
Don Lustenberger, DDI
Alyson Margulies, US Foods
Rob Michel, Edison Electric Institute (EEI)
Brooke Orr, Coca-Cola
Christopher Rosett, Comcast Cable
Carra Sims, Rand Corporation
Neha Singla, Gartner
Steve Stark, University of South Florida (USF)

Update on the 2017 SIOP LEC
"Innovations in Executive Coaching: Deepening Your Expertise in a Dynamic World"
October 20 & 21, 2017, Minneapolis, MN

Sandra O. Davis

As chair of the LEC for this year, I feel compelled to let all of you know about the planning and thinking behind this year's event. First of all, I am grateful to **Rob Silzer** for overseeing the LEC and even convincing me to serve as chair. Having the chance to give back to SIOP, to work with a fabulous group of committee members, and to deepen my own skills as an executive coach pulled me into saying "yes".

The Leading Edge Consortium (LEC) launched in October of 2005 under the leadership of three chairpersons: Rob Silzer, **Leaetta Hough**, and **David Campbell**. The purpose of every LEC then and now (this year is the 13th LEC) is to focus on a single I-O practice topic that will attract and engage senior, seasoned I-O practitioners and help move the field forward. Other topics over the years have included global selection and assessment, succession strategies, and talent analytics.

Our plans for this year would not have happened so readily without the expertise of the stellar committee members who said "Yes" when I called and asked for their help. Please join me in thanking **Erica Desrosiers, Michael Frisch, Tim Jackson, Rob Kaiser, Jeff McHenry**, and **Vicki Vandaveer**. Also, our plans would not have materialized so quickly without many in Divisions 14 and 13 responding to our early January survey about what topics would appeal to experienced practitioners. We heard loud and clear that you wanted new insights and not elementary "how tos."

Using those ideas as a springboard, we contacted potential speakers who we believed could advance insights and ultimately our individual practice of coaching. The format includes speakers, TED-style talks, conversation groups, networking, and a chance to capture our own learning as we go. We have six prominent experts on executive coaching including **David Peterson**, Carol Kauffman, Richard Kilburg, **Richard Boyatzis,** Karol Wasylyshyn and Robert Eichinger.

Our objective and guideline is to ensure that we as coaches who are in the business of helping others learn have a chance to learn ourselves. Click here for a link to our full agenda including speakers and bios. It is still not too late to register!

New Offerings for This LEC

We have several new offerings this year. First, although the conference begins on Friday, we are hosting two preconsortium workshops on Thursday for those who are looking for a deeper dive on a topic, specifically, Neuroscience for Coaching Leaders with Bob Eichinger and Team Coaching with Krister Lowe. Each workshop is offered twice so that participants can attend both sessions. We thought of this as an experiment, but I can already tell you that by mid-August they were close to being filled.

Second, in collaboration with MPPAW (the I-O group in the Twin Cities), we are offering a graduate student briefing on the basics of executive coaching. This briefing will occur just before their regular meeting, which will feature Vicki Vandaveer speaking on "The Important Role—and Obligation—of I-O Psychology in Advancing the Science and Practice of Executive Coaching".

Third, with the blessing of the Visibility Committee, we are holding an HR briefing event on the Thursday morning prior to the formal conference. This event is being chaired by **Karen Grabow** and will be a chance for HR professionals (who likely are not attending the LEC) to hear about the state of the art of

coaching in today's world in organizations. We have senior HR leaders and members of SIOP facilitating and serving on this panel.

The Committee's Overarching Objectives for This LEC

In answering the question, "What does success look like?" we arrived at the following criteria by which we hope you and our participants will judge this LEC.

1. Advance coaching as a practice that bridges and incorporates multiple psychology disciplines.
2. Be financially successful for SIOP (continue having the LEC achieve a positive impact).
3. Ensure participants experience the event as something that has helped them learn to be more effective coaches.
4. Build in some methodologies so the event does not just "end" after one and one-half days; that is, that learning and connections continue to advance the practice of coaching for participants long after the formal conclusion of the LEC.
5. Use the LEC topic as a vehicle for promoting possible research and for securing psychology as a necessary underpinning of all coaching work.

Executive Coaching: A SIOP Graduate Student Briefing

Wednesday, October 18, 4-5 pm.
In association with the October MPPAW meeting (5:30 social hour)
Courtyard Hotel, 1500 Washington Ave (near the University)

- Attendance is encouraged by all graduate students in psychology.
- Free admission. Advance notice of attendance to MPPAW would be helpful but not required in order to plan the briefing.

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Briefing Content

The graduate student briefing will provide an overview of executive coaching for graduate students in psychology. Executive coaching is a core practice area for I-O psychologists. This session will discuss coaching definitions, the coaching process, and the skills, knowledge, and experience needed to be an effective coach to business leaders. There also will be some discussion of the career opportunities and challenges in I-O psychology practice related to coaching.

Briefing Benefits

This is a special opportunity for psychology graduate students to learn about applied careers in I-O psychology practice and to preview how coaching can be included in a practice career. It is an excellent introduction to the field of Executive Coaching and a great opening session to the MPPAW featured speaker that night: Dr. Vicki Vandaveer speaking on *The Important Role and Obligation of I-O Psychology in Advancing the Practice and Science of Executive Coaching.*

Briefing Leaders

Michael Frisch, PhD
Consulting Psychologist/Executive Coach
Lead faculty for iCoach NewYork, a Baruch/CUNY Coach Training Program
Lead author of *Becoming an Exceptional Executive Coach*, AMACOM
A leading expert in executive coaching

Rob Silzer, PhD
HR Assessment & Development Inc.
Doctoral faculty, Baruch/Graduate Center City University of New York
Teaches I-O Psychology PhD level course on coaching at Baruch/CUNY
Editor of *Strategy-Driven Talent Management, The 21st Century Executive,* and *Individual Psychological Assessment* (all Jossey Bass and SIOP)
PhD in I-O Psychology and Counseling Psychology from University of Minnesota
Cofounder of MIOPIC: Minnesota I-O Psychology in Careers (predecessor to MPPAW)

Membership Milestones

Compiled by Jayne Tegge, Membership Services Specialist; and Stephany Below, Communications Manager

The Membership Milestones column is devoted to welcoming the newest SIOP members and recognizing long-time members. Each column lists the professional SIOP members who have joined the Society since the previous issue as well as recognizes members who have recently upgraded their membership. We also acknowledge the newest additions to SIOP's Sterling Circle. Click the links below to go directly to a list or continue reading to learn more!

New Sterling Circle Members   New SIOP Members and Upgrading Members

New "Associate Path to Membership" Members

Members are the heart and soul of SIOP and are greatly appreciated for their interest and contributions. An impressive list of distinguished members has been with the Society for 25 years or more. To recognize the contributions and loyalty of these dedicated members, SIOP has developed an initiative called the Sterling Circle. Sterling Circle members are honored in several ways and can be identified at SIOP events with a special ribbon on their badges. Learn more about the Sterling Circle here.

Following is a list of SIOP's newest Sterling Circle Members.* Read the complete list on the SIOP website!

Mark Agars	Cassie Barlow	Robert Bloom
Boris Baltes	Lynn Bartels	D. Ramona Bobocel
Russell Barcelona	Jeffrey Beaubien	Gerald Borofsky

Susan Bowman	Mark Huselid	Mark Poteet
Robert Bretz	Jeff Johnson	Peter Richardson
Sharon Buchbinder	Gary Jusela	Mark Rohricht
Maryalice Citera	Jean Kirnan	Sherry Rubenstein
Caroline Cochran	Ellen Kossek	Deidra Schleicher
Iris Cohen-Kaner	Mitchell Kusy	William Schoel
Patrick Conley	Vicki Crawshaw Kwarciany	Cynthia Searcy
Michelle Dean	Cynthia Lee	Eleni Speron
Patrick Devin	Glenn Littlepage	Mark Spool
Thomas Diamante	Amelia Livingston	David Spurlock
Margaret Durr	Jared Lock	Jeffrey Stanton
Dov Eden	David Lux	Laura Steighner
Romella El Kharzazi	Alison Mallard	Robert Steilberg
Eric Elder	Theresa Martelli	Lorraine Stomski
James Eyring	Charles Martin	James Tan
Gary Farkas	Suzanne Masterson	James Thomas
Jay Finkelman	Scott McIntyre	Todd Thorsteinson
Richard Flicker	Richard McLellan	Donald Truxillo
Harold Goldstein	Shawn Mikulay	Robert Vandenberg
Michael Goodstone	Philip Moberg	Don VandeWalle
Michelle Graef	Frederick Morgeson	Nicholas Vasilopoulos
Laura Graves	Kurt Motamedi	John Veres
Bill Handschin	Catherine Murensky	Lee Ann Wadsworth
Lisa Harpe	Susan Myers	Marie Waung
Bryan Hayes	Aaron Nurick	Sara Weiner
Charles Hobson	Brian O'Leary	R. Jason Weiss
Joseph Hoffman	Stephanie Payne	P. Gail Wise
Brenda Holdnak	Lawrence Pfaff	Paige Wolf Amy Yost
Katherine Holt	Jean Phillips	Brian Young
Allen Huffcutt	Charles Pierce	
Gregory Hurtz	Robert Ployhart	

New Members

The life blood of any organization lies in attracting new members who bring a special enthusiasm and interest. Membership in SIOP is growing, and we take great pleasure in welcoming our newest members. They comprise a wonderful mix of former Student Affiliates upgrading to full membership and professionals, including those who previously were Associate members and International Affiliates. SIOP looks forward to these new members' participation on committees and conferences as they experience the value of membership in the premier organization for industrial and organizational psychologists.

Following is a list of SIOP's newest professional members*:

Yalcin Acikgoz	Samuel Au	Daniel Benkendorf
Mohd Raafe Abdul	Rachel August	Sharen Bhatti
Lynne Allison	Alex Barriera	Hilary R. Bily
Rance Allman II	James Beevers	Jason A. Blaik
Norma Armstrong	Andrea Belcher	Kelly Bleeker

Bryan Bonner
Robert Boylan
Stephanie Anne Braganza
Joshua Brandt
Emma Brewer
Maria Brown
Nick T. Cale
Tim Carey
Michael Carriger
Marie Ciavarella
Sean Dailey
Rebecca Daisley
James Davis
Pega Davoudzadeh
Katee De Lorme
Shawn Del Duco
Michelle J. Dennis
Suzanne Devlin
Jennifer Dos Santos
Laura Dryjanska
Joseph Dunn
Jack Durand
Dan Eisen
Patrice Esson
Melissa Feigelson
Michael Flood
David Flore
Charles West Glover
Jay Gordon Jr.
Chris Griffin
Deborah Greer
Lori Grubs
Laura Gunter
Justin Hance
Michael Harris
Michael Andrew Haynes
Elizabeth Hendricks
Tresna Hunt
Kaifeng Jiang
Shanna Jinkerson
Oliver John
Danielle Jouglard
Hee Jung Kang
Michelle Katz
Neena Kaur
Grant Keller
Robert C. Kennedy
Kea Kerich

Andrew Kimmel
Adrienne King
Hillary Kuenn
Barbara Z. Larson
Clarice Larson
Robert Lauridsen
Christopher James Lyddy
Rebecca Lyons
Scott MacKenzie
Alain Maisterrena
Stephanie Marberry
Sheila L. Margolis
Lowell Matthews
Monica Lynne Matthews
Katrina McCoy
Kellie Rae McElhiney
Jeremiah McFarland
Stacy McManus
Jill Barrett Melnicki
Melanie Milhouse
Jerry Miller
Vonda K. Mills
Jessica Miranda
Patrick Mitchell
Lucy Morris
Carrie Nations
Alexander Nedilskyj
Gidget Nelson
Irelola Oladele-Ojo
Kalifa Oliver
Jeffrey Orlando
Tinisha M. Parker
Ken Pfligler
Shayla Proctor
Padmini Radhakrishnan
Aditi Raghuram
J. Paul Rand
Barbara Reilly
Jane Rhee
Sarah Riley
Crystal Robinson
Joe Rodriguez
Anna L. Sackett
Wandy San Miguel
Alison Santinello
Lourdes Santos
Peter Francis Saville
Scott SchmidtBonne

Jessica Mae Scott
Logan Sellers
Luisa Sersch
Chaunette Small
Amy-Kate Snowise
Wesley Stein
Mary Streit
Sabra Y. Stuermer
Elizabeth Supinski
Ying Siu (Yvonne) Tan
Frances Taveras-Amato
Kathleen Taylor
Jeannie Thompson
Andrew R. Timming
Samuel Tisdale
Jessica Tower
Dana Tucker
Jaquelen Tuñon
Terra Vance
Kathleen Voss
Paul Warner
Eloise Claire Warrilow
Elijah Wee
Allie Wehling
Cheryl Weiland
Ramon Wenzel
Charmon Parker Williams
Jeffrey Wilson
Ruth Wolever
Janiece Young
Stephen A. Woods
Anthony Jacob Zak

Irene Sasaki   Tiffany Poeppleman   Monica Elcot

*List compiled from Feb. 28-Aug 31, 2017

Donald Truxillo
Professor of Industrial-Organizational Psychology at Portland State University
Sterling Circle Member

Being a member of SIOP has deeply affected me both professionally and personally. It's been invaluable to my career, and it has allowed me to make a number of lifelong friendships with good people."

Comila Shahani-Denning
Professor of Psychology and Director of M.A. Program, Hofstra University
Sterling Circle Member

I first joined SIOP as a student member and attended my first conference in 1989. I remember attending different sessions and being so excited to listen to researchers whose journal articles I had just finished reading. I have attended most conferences since then—it is a fantastic few days of meeting old friends and making new ones. Every year, I make it a point to attend a couple of sessions about topics that are new or different. It helps keep me current in areas that I am less familiar with. I also make it a point to split my time between academic and practitioner-oriented presentations so that I can keep track of advances in both spaces. I always come home from the conference energized and excited about the field that has been the focus of my career over the past 30 years.

Herman Aguinis,
Avram Tucker Distinguished Scholar and Professor of Management, School of Business, George Washington University
Sterling Circle Member

SIOP is our virtual worldwide community. People change jobs and even careers, which sometimes means that people move within and across national borders. Yet, SIOP remains the virtual place that offers ongoing and uninterrupted professional, and even personal, stability. As a member for about a quarter century, I am very thankful for all the wonderful friends I have made through SIOP, as well as numerous research and applied projects I have initiated through SIOP connections. We should be very grateful and proud of SIOP and also remember to give back.

American Psychological Association Convention 2018:
San Francisco, California

C. Allen Gorman
2018 APA Program Chair

SIOP's (Division 14) program at APA 2017 in Washington, DC, was a fantastic success! Thank you to program chair **Mindy Shoss,** who put together an amazing program, and to all who presented at and attended the convention! We heard insightful talks by **Alex Alonso, Georgia Chao, Joanna Colosimo, Lori Foster, Barbara Fritzsche, Ann Huffman, Richard Landers, Elliot Lasson, Fred Mael, Fred Oswald,** and others on such topics as work psychology and sustainable development, open science in I-O psychology, creating datasets from Facebook and Twitter, aging in the workforce, younger workers, transitioning military veterans to the workforce, reporting compensation data, the identity crisis in I-O psychology, and more! We had two poster sessions that featured posters on occupational health and leadership, and paper sessions on topics such as occupational health psychology, organizational interventions, and individual differences in the workplace. Beyond our divisional programming, **Edwin Locke** participated in a panel discussion co-chaired by **Jeffrey Cucina** and **Ted Hayes** on the replication crisis in psychology.

We also had a great reception at Bar Louie, cosponsored by the Personnel Testing Council of Metropolitan Washington! Our reception was attended by SIOP past presidents, APA council representatives, I-O practitioners, academics, students, and even several new SIOP members. Kudos to those that braved the driving rain to make it to the reception!

It's not too early to start thinking about next year's convention in San Francisco, California! If you've never attended APA, please join us. You'll find not only great presentations within I-O but also across other divisions of APA. An added bonus, APA discounts registration fees for first-time attendees who are APA members.

There are two types of programming that you should consider (note the different deadlines!):

Collaborative Programs (collaborative with other divisions):
A collaborative program pulls together multiple perspectives on a significant issue for psychologists and society at large; involves more than one core area of psychology, that is, science, practice, education, public interest; and reflects interdisciplinary and relevant aspects of diversity. The deadline for submitting collaborative programming is **October 13.** Collaborative proposals:

- should be 1- or 2-hour session proposals that highlight collaborative ideas and integrative approaches;
- must have at least two participants and a chairperson (individual presentations (paper/poster) will not be considered);
- must identify a minimum of two or up to seven divisions relevant to the proposal content
- are encouraged to
    - incorporate innovative presentation formats;
    - include participants across all career stages, settings, and fields; and
    - integrate psychological science and practice

Collaborative proposals are evaluated on the following criteria: broad appeal, importance of work, current and timely topic, originality and innovativeness, interactive/creative format, scientific/empirical base, and attention to diversity.

Divisions you might want to consider collaborating with include:
- Div 1: Society for General Psychology
- Div 2: Society for the Teaching of Psychology
- Div 5: Quantitative and Qualitative Methods
- Div 8: Society for Personality and Social Psychology
- Div 9: Society for the Psychological Study of Social Issues
- Div 13: Society of Consulting Psychology
- Div 18: Psychologists in Public Service
- Div 19: Society for Military Psychology
- Div 21: Applied Experimental and Engineering Psychology
- Div 35: Society for the Psychology of Women
- Div 38: Society for Health Psychology
- Div 41: American Psychology-Law Society
- Div 45: Society for the Psychological Study of Culture, Ethnicity and Race
- And many more! Check out the listing of divisions here: http://www.apa.org/about/division/index.aspx?_ga=1.260482957.1628625474.1464221820

Traditional Programming: Submissions
You can also submit your work the regular way, as a poster, presentation, or symposium, through the open call, due **December 1**.

How to submit: Submissions for all types of programs will be received through the official APA Convention website (http://www.apa.org/Convention). Remember collaborative proposals are due **October 13.** Other program submissions are due **December 1**.

More information about submission requirements can be found on the APA web site at apa.org/convention.

IOTAs

David L. Tomczak
George Washington University

Honors and Awards

Mindy Bergman, **Kenneth Brown**, **Xiao-Ping Chen**, **Kenneth De Meuse**, **Gerald Goodwin**, **David Mayer**, **Daniel Skarlicki**, **Joann Sorra**, and **Piers Steel** have been elected as the new APA Fellows.

Ramon Henson won two awards for his book *Successful Global Leadership*: a bronze medal in the International Business category of the 2017 Axiom Book Awards and one of five finalists in the 2017 International Book Awards competition.

Lisa Leslie has been named one of the 40 Most Outstanding MBA Professors Under 40 by *Poets & Quants*.

Dianna Stone and colleagues have published a new handbook, the *Handbook of the Psychology of the Internet at Work*.

Transitions, New Affiliations, Appointments

Michael Hargis has been elected as interim provost at the University of Central Arkansas.

Jamie Lerner has been appointed as chief of staff for Autoscribe Corporation.

Daniel Russell has been appointed as partner of RHR International.

Gary Schmidt has joined Korn Ferry as senior client partner.

Xiaohong Xu will join the Department of Psychology at Old Dominion University as a new faculty member in fall 2017.

Sam McAbee has joined the IO faculty at Bowling Green State University in fall 2017. He joins current faculty members **Clare Barratt, Margaret Brooks, Scott Highhouse**, and **Mike Zickar**.

Good luck and congratulations! Keep your colleagues at SIOP up to date. Send items for IOTAs to **Tara Behrend** at behrend@gwu.edu.